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ABSTRACT

A study was conducted to determine the strategies used by 145 community colleges in Arizona, California, New Mexico, and Texas to meet the educational needs of Hispanic students and to investigate the relationship between these strategies and Hispanic student retention rate. Questionnaires were sent to the presidents of Southwestern community colleges with a 5% or greater Hispanic enrollment, requesting information on retention rates and strategies in effect. Study findings, based on responses from 88 colleges, included the following: (1) 50% of the colleges actively recruited Hispanic students; (2) 37.5% offered financial aid; (3) 92% provided academic advising about transferability of courses, 70.5% career counseling into selective programs, 88.6% academic support services, and 21.5% special orientation; (4) 38.6% offered bilingual courses, 55.6% English as a Second Language (ESL) courses, 50% Hispanic studies courses, and 100% developmental courses; (5) 89.8% had mandatory assessment, and 64.8% had mandatory placement; (6) 31.6% provided staff development to increase sensitivity to the problems of Hispanic students; and (7) 2.6% had a proportional ethnic composition of faculty and staff. An analysis of retention rates showed that retention was improved by proportional financial aid, career counseling into selective programs, bilingual education, ESL classes, and Hispanic studies classes. The study report includes an extensive literature review on population trends, the Hispanic socioeconomic cycle, Hispanic participation in higher education, and recruitment and retention programs and strategies. The study instrument and a list of 111 references are appended. (EJV)

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STRATEGIES FOR INCREASING RETENTION OF HISPANIC STUDENTS IN COMMUNITY COLLEGES

by

DORIS KAY PARKER WALKER, B.S., M.Ed.

DISSERTATION

Presented to the Faculty of the Graduate School of

The University of Texas at Austin

in Partial Fulfillment

of the Requirements

for the Degree of

DOCTOR OF PHILOSOPHY

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STRATEGIES FOR INCREASING RETENTION

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COMMUNITY COLLEGES

APPROVED BY

SUPERVISORY COMMITTEE:

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STRATEGIES FOR INCREASING RETENTION

OF HISPANIC STUDENTS IN

COMMUNITY COLLEGES

Publication No. _____

Doris Kay Parker Walker

The University of Texas at Austin, 1988

Supervising Professor: Dr. Leonard A. Valverde

The purpose of this study was to determine strategies that community colleges in Arizona, California, New Mexico, and Texas are pursuing to meet the needs of Hispanic students. It was also the purpose of this study to investigate the relationship between strategies employed by the colleges and retention rate of Hispanic students in the colleges.

Methodology used was to survey 145 community colleges by questionnaire. Questionnaires were sent to presidents at 11 community colleges in Arizona, 73 community colleges in California, 15 community

colleges in New Mexico, and 46 community colleges in Texas to obtain data regarding strategies now in place for the purpose of retaining Hispanic students. Also, one semester retention rates of Hispanic students and of general student bodies were obtained.

The analysis in this dissertation focused on the relationship of fourteen independent variables to one dependent variable (Hispanic student retention). The independent variables were divided into the following three categories:

--Institutional Policy variables (three strategies)

--Student Services variables (six strategies)

--Curriculum and Instruction variables (five strategies)

The findings in this dissertation confirmed that student retention did vary, in relation to strategies used by community colleges for the purpose of increasing retention. Results of testing the fourteen variables in this dissertation indicated that the strategies of offering proportional financial aid, career counseling into selective programs, bilingual education, ESL classes, and Hispanic ethnic courses were related to Hispanic retention rates. It was not possible to determine whether the strategies of mission statement concerning Hispanic

students, proportional Hispanic staff, funds for Hispanic research and conferences, special Hispanic orientation, academic support services, academic advising concerning transferability of courses, or developmental education courses, were related to college retention, because there was not enough variance in the employment of some of these strategies to analyze, and because some of these strategies were collinear with other strategies.

The contribution of this study is to determine which strategies now being used by community colleges are related positively to the retention of Hispanic students. Community college administrators may benefit by information about strategies to add to or delete from their present programs as they strive to reduce the high attrition rates of Hispanic students.

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CHAPTER 1

INTRODUCTION

Adaptability is a universal element of the community college mission. Community colleges strive to serve the changing needs and changing population patterns of their communities. Edmund J. Gleazer (1980) reiterated this goal in Values, Vision and Vitality with his list of requisite community college elements:

1. The college is adaptable. It is capable of change in response to new conditions and demands, or circumstances.
2. The college operates with a continuing awareness of its community.
3. The college has continuing relationships with the learner.
4. The college extends opportunity to the "unserved".
5. The college accommodates to diversity.
6. The college has a nexus function in the community's learning system. (p. 143)

Community colleges in Arizona, California, New Mexico, and Texas face changes in ethnic demographic patterns because of a substantial rise in percentage of Hispanic students attending community colleges. In this study, a Hispanic person is defined as anyone who traces his or her heritage to a Spanish speaking nation. Hispanic people include Mexican Americans, Puerto Ricans, Cubans and other Hispanics; and the

largest of these groups is Mexican American, who make up 60 percent of all Hispanics in the United States. The rise in percentage of Hispanic students is a continuation of growth patterns documented in several studies. The Hispanic population in the United States grew by 61 percent between 1970 and 1980 compared to 5.8 percent growth of Anglo population and 17.3 percent growth of black population (Fuchs, 1984). Houston Independent School District enrolled 51 percent Hispanic first graders as opposed to 34 percent Hispanic total enrollment in 1985. Of Hispanics who pursued post-secondary education nationally, 59 percent attended community colleges (Olivas, 1979). In Texas, 75 percent attended community colleges (Yates, J., personal communication, June 11, 1986). Of Hispanics who pursued post-secondary education in California, 82 percent attended community colleges (de los Santos, Jr., Montemayor, & Solis, Jr., 1980).

Hispanic students are not well represented, numerically, among college students. They comprise 7.7 percent of the national college enrollment (U. S. Bureau of the Census). According to the Office of Civil Rights (1984), 6.7 percent of all college enrollees are Hispanic. In Arizona, 11.1 percent of all college enrollees are Hispanic; in California

the percentage is 13.3; in New Mexico the percentage is 24.0; in Texas the percentage is 17.5. In community colleges, 56 percent of the Hispanic students who enroll will drop out before completing their first year, compared to 36 percent of Anglo students. According to Astin (1982, p. 177), "The single most important factor contributing to the severe underrepresentation of Chicanos [in higher education] is their extremely high rate of attrition from secondary school. The second most important factor is their greater than average attrition from undergraduate college, particularly community colleges."

Hispanic college students have several qualities which make them unique. They often come from a low-income home, are academically underprepared, culturally different, and limited in English proficiency (Arciniega, 1982; Davis, Haub, & Willette, 1983; de los Santos, 1972; Duran, 1983; Hodgkinson, 1985; Lopez, Madrid-Barela, & Macias, 1976; Subcommittee on Census and Population, 1983; U.N. Report on the World Population, 1984). Special efforts must be made by community colleges to retain Hispanic students in order to help them break out of their poverty-low-education-level cycles and to prepare them for higher-level careers in tomorrow's world.

The Problem

The rise in percentage of Hispanic population is a result of natural growth and substantial immigration (Kaufman, Dolman, Bowser, 1983). The two main reasons given for high natural growth in Hispanic population in the United States are age of Hispanic women (median age is 22.1 compared to Anglo median age of 34) and birth rate in Hispanic women (2.9 as compared with 1.7 birth rate in Anglo women). More Hispanic families have children than do Anglo families (2/3 compared to 1/2), and the average number of children per family is greater.

A large emigration from Mexico is the result of poor economy and high growth problems in Mexico. Mexico is unable to provide basic social services or employment to its growing population; the population was 59 million in 1975, 75.7 million in 1983, and it is estimated to be 115 million by the year 2000 (Morris, 1985). In 1977, Mexico had a yearly growth rate of 3.5 percent, but after a government program on family planning, this rate was reduced to 2.7 percent.

During the 1970s, 65,000 people immigrated legally to the United States from Mexico, and an estimated 900,000 immigrated illegally. Yearly increase of undocumented workers is between 500,000 and 1.8

million (Austin American Statesman, 1986; Fuchs, 1984; Harwood, 1985; Weintraub and Ross, 1980). The number of undocumented persons in the United States is between 2 million and 12 million (American Association for the Southwest Region, 1987; Corwin, 1978; Huddle, Corwin & McDonald, 1985; Levine, Hill & Warren, 1985; Weintraub & Ross, 1980). It is difficult to determine how many undocumented workers have immigrated to the United States from Mexico for several reasons: (1) Some statistics are based on numbers of apprehensions of undocumented workers; the Border Patrol is vastly understaffed (3,000 agents patrol 6,000 miles of border). (2) Patrolmen commonly do not apprehend females because they fear sexual harrassment charges. (3) There is a shortage of detention space (Harwood, 1985). (4) The Immigration Naturalization Service procedures are outdated and of dubious legality (Morris, 1985). (5) Undocumented workers mistrust census takers. (6) Census takers do not work the Spanish-speaking communities to the extent they do English-speaking communities.

The Equal Protection Clause of the Fourteenth Amendment prohibits denying undocumented workers' children a free public education. In 1982 the Supreme Court struck down the last state education code

which prevented enrollment of undocumented workers' children. Some Texas school districts had previously charged a tuition of $1,000 per child per year. The cases concerned were Doe vs. Plyler in 1980 and Texas vs. Certain Named and Unnamed Undocumented Alien Children in 1980. Lower courts have extended the Supreme Court's charge to subsidize day care and other public services. The rapid increase in number of undocumented aliens combined with the court order to offer them free education at local expense have caused a need for more funds in schools close to the Mexican border.

Several other legal actions affect Hispanic public school students. According to San Antonio I.S.D. vs. Rodriguez in 1973, a state is required to provide equal access to education--not necessarily a uniform expenditure per pupil across school districts. In 1984, Texas House Bill 72 provided an equalization formula to provide poorer school districts with more funds per pupil.

A basic philosophy of education in the United States is that limited-English-proficiency students will not meet with discrimination. Public Law 94-142 (1975) says that evaluation and placement instruments for linguistically and culturally different groups must not

be discriminatory. The Supreme Court, in the Lau vs. Nichols decision (1974) states, "There is no equality of treatment merely by providing students with the same facilities, textbooks, teachers, and curriculum; for students who do not understand English are effectively foreclosed from any meaningful education" (Subcommittee on Census and Population, 1983, p. 288).

Because the Hispanic population in the United States grew by 61 percent between 1970 and 1980 and the rate has been increasing since 1980, school administrators feel the pressure to plan for far greater percentages of Hispanic students in their classrooms in the future. The Hispanic composition of the United States population by the year 2040 is predicted to be approximately 18 percent as compared to an predicted 14.6 percent black composition (Fuchs, 1984). The Hispanic composition of Texas population is predicted to become 30 percent. As these Hispanic students arrive at community colleges in increasing numbers over the next two decades, college administrators must audit their institutions in order to meet the needs of Hispanic students. The following chart shows the actual increase in Hispanic community college enrollment in Arizona, California, New Mexico and Texas as

reported by the National Center for Education Statistics and the 1984 Higher Education General Information Survey.

	1976	1978	1980	1984
Arizona	9,659	11,137	11,023	12,825
California	96,597	91,736	105,365	112,579
New Mexico	774	1,285	1,893	3,291
Texas	*	*	*	56,587*

* (Texas data not available except for 1984)

What are obvious needs of Hispanic students as they attend community colleges? These students may need special curricula, bilingual and ethnic role models, cultural support, specialized academic advisement, academic support, career counseling, and financial aid. What are the program strategies of community colleges for meeting these needs? Institutional strategies that have had some support in research include specialized student services, curriculum and instruction, and institutional policy.

Purpose of the Study

The primary purpose of this study is to determine what strategies community colleges in Arizona, California, New Mexico, and Texas are pursuing to meet the needs of Hispanic students. A second purpose is to determine which strategies affect in a positive way the retention of Hispanic students in community colleges.

Retention is defined in this research as the percentage of enrolled credit students who complete one semester. Many community college administrators feel that retention rates for their students are almost impossible to compute and invalid when they can be computed. The California Postsecondary Commissioner states,

> Community college students enroll in college with a wide diversity of goals and objectives that may be accomplished in a few weeks, a term or two, or a two year program that extends over several years. Thus college administrators cannot compute retention rates unless they know whether their students have completed their objectives before they leave the college....Also there are increasing numbers of"reverse" transfer students to the community college who may already have advanced degrees and for whom retention rates make little sense beyond completing the term for which they are enrolled (D. Knoell, personal communication June, 1987).

Retention is, by definition, the retaining of students over a set period of time. However, retention may be applied in two different

ways, depending upon the nature of the data. Student-specific data is collected when a group of students is identified and tracked from year to year. The percentage of students of the original group who remain in the institution is the retention rate for that group. Aggregate data is collected when the change in the number of students from one level to the next in subsequent years is noted. Thus the percentage difference in the number of students enrolled as freshmen in 1975 and the number enrolled as sophomores in 1976 is the attrition for that year (de los Santos, Jr., et al., 1980).

Therefore, a researcher must decide the following three things about retention data that she collects: (1) Will the data be student specific or aggregate? (2) Will the data cover a time period of one semester, one year, two years, or the length of time needed to complete the student's objectives? (3) Will the data include credit students, non-credit students, or both?

The data reported here are student-specific, over a time period of one semester, and include credit students only. Retention rate is the percentage of credit students who enrolled at the beginning of a semester who are still enrolled at the end of that same semester.

Significance of the Study

The information that was obtained from this study concerning the relationship of college retention strategies to community college retention is significant for four reasons:

1. It would add to the amount of knowledge available to educators regarding retention theory. Presently there are three major schools of thought: those who think persistence at college is determined largely by student traits, those who think persistence at college can be affected by strategies employed by the college, and those who think persistence at college is determined by interaction of student traits and college strategies. Also there are varying opinions on the value of retention studies at community colleges because people attend and withdraw from community colleges for different reasons than they attend and withdraw from four-year institutions.

Finally, opinions vary as to whether retention should be measured by semester completion, program completion, or aggregate enrollments in successive years.

2. There is a need for community college administrators to know how to react to increasing Hispanic enrollment. The Hispanic population

of this country is increasing rapidly and is expected to continue increasing. Most Hispanic high school graduates who choose to further their education choose to do so in community colleges.

3. There is a need for community college administrators to know how to minimize Hispanic attrition rates. They need to know which college retention strategies have the strongest influence on retention and which have the weakest influence. They need to know what would happen without each college retention strategy. Community colleges historically have had higher attrition rates than four-year institutions, and Hispanic students have had higher attrition rates than non-Hispanic students.

4. Educators must better understand the impact of retention strategies on student retention to justify the need to maintain or increase funds. They need to know which strategies have the strongest effect and to direct funds that way. There is presently a public outcry against taxes and a demand for increased accountability concerning the use of funds. State and federal support and equalization plans are not dependable (Marsee, 1986). Administrators must be equipped to minimize negative effects of cutbacks in funding.

To better understand the relationship between college retention strategies and Hispanic student retention, this dissertation examined effects of such strategies on retention rates. The following sections explain further if and how retention strategies are related to Hispanic student retention. The primary purpose of this dissertation was to examine the following questions.

Research Questions

This study seeks to answer several questions:

1. To what extent does retention vary with college strategies to meet the needs of Hispanic students?

2. To what extent is retention related to a college employing the following institutional policies on commitment to the education of Hispanic students:

(a) a written mission statement concerning Hispanic students

(b) proportional ethnic composition of faculty and staff

(c) funds for research and conferences about the needs of Hispanic students.

3. To what extent is retention related to a college employing the

following student services:

(a) recruitment of Hispanic students

(b) adequate financial aid

(c) academic advising about transferability of courses

(d) special orientation

(e) career counseling into all level careers

(f) academic support services

4. To what extent is retention related to a college employing the following curriculum and instruction retention strategies:

(a) bilingual programs and/or English as a Second Language (ESL)

(b) Hispanic ethnic course offerings

(c) developmental education course offerings

(d) mandatory assessment and placement

(e) staff development on sensitivity to needs of Hispanic students.

Operational Definitions

1. Retention will be measured by a ratio of the number of Hispanic students who complete the fall semester of 1986 to the number of Hispanic students who enrolled during the fall of 1986. Spring semester

retention will be measured where available. The difference between total retention and Hispanic retention will be noted. According to the literature, the average Hispanic retention after one year is 45 percent according to Duran (1983) or 44 percent according to Davis, Haub, & Willet (1983). Average Anglo student retention after one year is 66 percent (Duran, 1983; Davis et al., 1983).

2. Student services strategies include: (a) recruitment of Hispanic students, (b) academic advising about transferring to four-year colleges, (c) orientation, (d) career counseling, and (e) academic support services. These strategies will be measured with a categorical "yes" or "no" answer by the Dean of Student Services at each college. Descriptive categories will also be checked. Special note will be made as to availability of materials and speeches made in Spanish and by Hispanic staff.

3. Adequacy of financial aid will be measured by comparing the percent of Hispanic students receiving financial aid to the percent of all students on a campus receiving financial aid.

4. Availability of special curriculum and instruction strategies includes: (a) Hispanic ethnic course offerings, (b) bilingual programs

and/or ESL course offerings, (c) developmental education course offerings, and (d) mandatory assessment and placement. Availability will be measured with a categorical "yes" or "no" answer on the questionnaire. Descriptive categories will also be checked.

5. Staff development on sensitivity to needs of Hispanic students will refer to: (a) continuous in-service training workshops, (b) in-house literature, and (c) funds for attending applicable conferences or other methods which may be described.

6. Administrative commitment to education of Hispanic students will be measured by whether there is a written policy concerning Hispanic students within the college mission statement, by proportion of Hispanic staff, and by budgeted money for specific Hispanic oriented programs.

7. Ethnic composition of faculty and staff (includes administration) will be measured by the extent to which it matches the composition of the student body. This will be answered with a percentage figure.

8. Research about the needs of Hispanic students will be measured by whether funds are made available to and used by faculty and staff to do such research and to travel to and make presentations on this subject

at appropriate conferences. It will be measured by means of a categorical "yes" or "no" and by checking descriptive categories.

Limitations

Limitations of the study were as follows:

1. Only community colleges in the four states that border Mexico were studied, and this limits the generalizability of the findings.

2. The subject schools were not selected at random, and this is a restriction on the validity of the study.

3. All community colleges with Hispanic enrollments of five percent or above were included in the study. This percent ranged from five percent to 86 percent, which is a very wide range. Also the dispersion is skewed, with 77 percent of the colleges having less than 25 percent Hispanic enrollment.

4. Diversity of the Hispanic population was not accounted for. Since Hispanic community college students are not homogeneous, the generalizability of the findings is limited.

5. Only one factor, retention, was studied for relationship to college retention strategies. Further research could study achievement,

satisfaction, and other relationships to these strategies.

6. The definition of retention can determine the kind of data obtained. Retention was defined as the percentage of credit students who enrolled at the beginning of a semester who are still enrolled at the end of that same semester. Therefore, the findings cannot be generalized to non-credit students, nor can the retention figures be compared to yearly retention figures.

7. Only 14 institutional strategies were studied for relationship to retention. Further research could study other strategies or other factors entirely, which could be related to retention.

8. No effort was made to measure the effectiveness of implementation of the strategies. Therefore the variety of implementation is unknown.

Organization of the Dissertation

This study is presented in five chapters. Chapter One gives an overview of the problem, including the purpose and significance of the research. Research questions, limitations of the study, and special definitions are also presented.

Chapter two is a comprehensive examination of literature related to Hispanic population growth, Hispanic socio-economic cycle, Hispanics in higher education and retention programs and strategies.

Chapter Three describes the method planned for this research. Subjects, procedure, instrumentation and research design are introduced.

Chapter Four presents the data analysis, including descriptive statistics. Chapter Five reviews the findings identified in Chapter Four and explains the results as related to the research questions. Chapter Five also expands on the research findings through observations, conclusions and recommendations.

CHAPTER 2

REVIEW OF THE LITERATURE

Community colleges in Arizona, California, New Mexico, and Texas face a changing ethnic demographic pattern because of a rise in percentage of Hispanic students. This is caused by the combined factors of migration from Mexico and a rapid growth rate among Hispanic Americans. Community colleges' mission statements universally emphasize adaptation to needs of the community and embracing cultural diversity of the community; therefore they must involve themselves in strategic planning for this change. This study was instigated to determine whether or not community colleges' planned strategies match community colleges' Hispanic students' needs.

Several issues will be discussed by the review of literature. First, the increase in Hispanic population will be explained through a number of demographic studies and through a short history of United States immigration policy. Second, analyses of socioeconomic problems of Mexican Americans will be reported. Third, literature on Hispanic students in higher education will be summarized. Finally, programs and strategies which meet the needs of Hispanic students in community

colleges will be reviewed.

Increase in Hispanic Population

The Hispanic population in the United States has increased since 1970 in the following numbers: in 1970 it was 9,072,602; in 1975 it was 11.2 million (Cabrera, 1978); in 1980 it was 14.6 million; in 1985 it was greater than 18 million (Fuchs, 1984; and Subcommittee on Census and Population, 1983). Projections are for a Hispanic population of 24 million by the year 2000 and 47 million by the year 2020 (Hodgkinson, 1985). Birth rate declined in the United States from 1964 to 1979, but the decline was all Caucasian.

The two main reasons for increase in percentage of the Hispanic population are high fertility and immigration (Santiestevan, 1984). One demographer adds that improvement in census-taking contributes to growth. Demographic studies generally agree as to these reasons:

> Fueled by the relatively high fertility of most Hispanic groups and increasing immigration, both legal and illegal, their numbers grew by about 265 percent from 1950 to 1980, compared to just under 50 percent for the total U.S. population. If immigrants to the United States were to continue at the recent estimated total of about 1 million/year (legal and illegal, Hispanic, plus Asians and all others), Hispanics

> could number some 47 million and comprise 15 percent of the population by 2020, displacing blacks as the largest minority (Davis et al., 1983, p. 3).

However, research is inconclusive as to whether this growth is a problem or a contribution. Simon states the following opinion:

> The real population problem is not that there are too many people or that too many babies are being born. It is that others must support each additional person before that person contributes in turn to the well-being of others.... On balance, immigrants contribute more to any economy than they take, in the United States and most other places. (1981, p. 4)

Contributions of immigrants, listed by Simon, are taxes, energy and resources, production of goods and services, efforts to beautify and purify the environment, and new ideas and improved methods for efficient production. The American Assembly for the Southwest Region (1987) described the impact on labor markets as locality- and industry- specific.

A United Nations report on the world population, however, warns of problems that often accrue: "Where population growth outpaces the supply of social services, it can truly be said that poverty breeds poverty" (U.N. Population Study, 1984, p. 71). A measure of well-being

can be determined by the presence of health services, basic nutrition, safe water, literacy, and access to employment. It is a general rule that when growth of population and the fertility rate are high, then the well-being of the population is low (U.N. Population Study, 1984).

High Fertility

Growth of the Hispanic population has been calculated to be 56 percent as a result of fertility and 44 percent as a result of immigration (Masnik and Pitkin, 1982). The fertility rate of Hispanics is 60 percent higher than the rate of non-Hispanics, and Mexican Americans have the highest fertility rate of all Hispanics (Davis et al., 1983). Mexican Americans have 2.9 children, while Anglos have 1.7, and the number that would stabilize the population is 2.1 (Hodgkinson, 1985).

Often, the main reasons given for a higher fertility rate in Hispanics are less education and less income than other groups. These factors correlate with high fertility rates in all groups of people (Davis et al., 1983). Thirty percent of all Hispanics live on incomes below the poverty line, and as a group, Hispanics have two years less education than Anglos and 1-1/2 years less education than blacks

(Subcommittee on Census and Population, 1983). The United Nations Population Study (1984) says, "Education, particularly education of women, appears to exert a major influence on the level of fertility and infant mortality" (p. 69). Demographers note that stated preference for family size is not always matched by behavior. Many women know theoretically how to prevent pregnancy, but they are ignorant of where to obtain contraceptives (United Nations Population Study, 1984). Low use of contraceptives among Hispanics and adherence to tradition are two other reasons for the higher Hispanic fertility rate.

Hispanics live primarily in five southwestern states: Arizona, California, Colorado, New Mexico, and Texas. However, they are becoming less regionalized. In 1970, 87 percent of all Hispanics lived in Arizona, California, Colorado, New Mexico, and Texas; in 1980, 83 percent of all Hispanics lived in these five states (Davis et al., 1983). More than 50 percent of all Hispanics live in California and Texas, and they comprise more than 20 percent of the population in each of these states (Subcommittee on Census and Population, 1983). In 1980, Hispanics constituted 21 percent of the population in Texas, 20 percent in California, 36.6 percent in New Mexico, and 16.2 percent in Arizona

as compared to 14 percent of the national population (Santiestevan, 1984).

Hispanics are more urban than they are rural; 88 percent live in large metropolitan areas. Los Angeles had the largest metropolitan Spanish-origin population in the country in 1980 with more than 2 million Spanish-origin people. Six of the top seven metropolitan areas in percent of Spanish-origin population are in Texas: Laredo 91.5 percent, McAllen-Edinburg-Mission 81.3 percent, Brownsville-Harlingen 77.1 percent, El Paso 61.9 percent, Corpus Christi 48.5 percent, and San Antonio 44.9 percent. Between 1980 and 1990, the most rapid growth in percentage terms is projected to take place in Houston, San Diego, Salinas-Monterey, and Los Angeles. Cities making the greatest jump in rank will be Houston, San Diego and Austin (Santiestevan, 1984).

Besides having a high fertility rate, low income, less education and being more urban than rural, Hispanics have several other unique characteristics. As a group they are young, with a median age of 22.1 compared to the non-Hispanic median age of 31. Twenty-three percent live in homes maintained by women. Hispanic high school students graduated at the rate of 55 percent, while Anglo high school students

graduated at the rate of 83-88 percent (Astin, 1982; Davis, 1983; Duran, 1983; Parnell, 1985; and Subcommittee on census and population, 1983). Of Hispanic students who graduated from high school, 21 percent attended college as compared with 19.8 percent of Anglo high school graduates (Duran, 1983). Astin (1982) found that 38 percent of Anglo high school graduates attended college. Ten percent of Hispanics graduate from college, whereas 25 percent of non-Hispanics do.

Spanish is spoken in the homes of 5.3 percent of Hispanics in the United States, but it is spoken in the homes of 20 percent of Hispanics in Texas, 30 percent of Hispanics in New Mexico, 13.3 percent of Hispanics in Arizona, and 14.5 percent of Hispanics in California. Spanish speakers have more reported difficulty speaking English than home speakers of other non-English languages have, according to the Subcommittee on Census and Population, 1983. Of children, age five or older who speak Spanish at home, 25 percent are limited in English proficiency, whereas children who speak another language besides English or Spanish at home, only 12.9 percent are limited in English proficiency.

Hispanics have problems in the job market as a result of limited English proficiency, discrimination, and lower levels of education than non-Hispanics. Hispanics are less likely to be managers, administrators, professionals, or technical workers than non-Hispanics. In 1982, Hispanic unemployment rate was 15.2 percent, compared to the national unemployment rate of 10.7 percent (Davis et al., 1983). In 1981, Hispanic median income was $16,401, compared to the median income of $23,517 for Anglos and the median income of $13,266 for blacks.

Immigration

Immigration policy and domestic politics in the United States and Mexico affect the Hispanic population in Arizona, California, New Mexico, and Texas. United States Immigration Law makes it illegal for Mexicans to cross the border into the United States without documentation. However, until 1986, it has not been illegal for an employer in the United States to hire an undocumented alien, and therefore, the policy has encouraged employers to seek cheap labor.

Cities and counties in the United States are required by the federal government to make social services such as education, health, and

welfare available to undocumented aliens, free of charge. The federal government offers no reimbursement for this requirement. There is a yearly numerical limitation on immigration of 20,000 per country and of 270,000 worldwide. There are no national-origin quotas as in the past. There has been no major immigration law reform since 1965. Major reform has been considered since 1976, but no reform has been made into law until 1986.

From 1875, when the first immigration laws were passed in the United States, until 1920, these laws were qualitative in nature. They excluded convicts, subversives, certain races, and aliens who entered illegally. In 1921, the national origins quota system was established. The annual number of immigrants from each country could be 3 percent of the number of individuals in the United States of that particular national origin, severely restricting Asians and East Europeans. Also in the year of 1921, the Border Patrol was established.

World War II brought about the Alien Registration Act in 1940. Aliens were required to be fingerprinted and to report changes of address. In 1942, the Bracero Program began; through it agricultural workers were admitted temporarily to the United States from Mexico.

The Immigration and Nationality Act was passed over President Truman's veto in 1952. This law tightened screening and security procedures and established qualitative priorities within national origin quotas. In 1953 and 1954, "Operation Wetback" was performed, in which illegal aliens were rounded up and forced out of the United States because of the post-Korean War economic slowdown (Weintraub & Ross, 1980).

Presidents Truman, Eisenhower and Kennedy were critical of the immigration laws of the United States, and each urged reform (Levine, Hill & Warren, 1985). President Kennedy finally introduced reforms, and President Johnson signed them into law in 1965. The 1965 Immigration and Nationality Act Amendments abolished the national origins quota system and the Bracero Program. These amendments placed a fixed ceiling of 120,000 immigrants per year from the Western Hemisphere.

President Carter signed further quantitative restrictions into law. In 1978, a single world-wide annual limit of 290,000 immigrants was set. Then in 1980, this was reduced to 270,000 with a ceiling of 20,000 per country (Levine et al., 1985). President Carter also

appointed an Interagency Task Force on Immigration which studied immigration laws and recommended reforms. Their recommendations included the following reforms: (1) It should be unlawful to hire undocumented aliens or to assist them in obtaining work. (2) Residency should be granted to continuous residers since January 1, 1970. (3) Border enforcement resources should be increased. (4) Immigration ceilings for Canada and Mexico should be increased from 20,000 to 50,000 (Corwin, 1978; Levine et al., 1985; and Weintraub & Ross, 1978). The Carter Proposal was rejected by Congress, and Congress appointed its own investigative committee called the Select Commission for Immigration and Refugee Policy. Out of these two studies, an immigration reform act eventually evolved. This bill became the Immigration Reform and Control Act and was introduced into Congress in 1982, 1984 and 1986. It did not pass in 1982 or 1984 because of irreconcilable differences between the versions of the two houses (Miller, 1985). The Act passed in November, 1986, and provided the following reforms: (1) employer sanctions, (2) amnesty for aliens residing in the United States since January 1, 1982, (3) minimal strengthening of the Border Patrol and (4) a temporary worker program

(Congressional Digest, 1986).

Mexico and the United States view the undocumented worker and immigration law reform differently. Mexico assigns great importance to the entire issue, whereas the United States relegates the issue to a place of lesser importance. Mexico has a united leadership on the issue; the United States does not. Mexico views the issue with a historical perspective (much of the southwest part of the United States used to belong to Mexico), whereas the United States sees the issue only in the present or future perspective. Mexico views migrants as human beings; the United States seems preoccupied in legalistic categorizing of migrants. Mexico views the issue as a foreign affairs issue, while the United States treats it as a domestic issue (North, 1981). Mexico wants to debate the issue on the presidential level; the United States relegates it to the lowest possible governmental level. There is a trade imbalance which affects these two opposing perspectives: 60 percent of Mexico's exports go to the United States, while less than 5 percent of United States' exports go to Mexico. Further, Mexico needs emigration and the United States needs Mexican oil (Weintraub, 1981), and United States agriculture needs cheap labor

to succeed. Mexico feels the United States is insensitive and neglectful towards its neighbor. The United States sometimes feels impatience toward Mexico for not making major changes in its domestic and foreign policies.

Mexico has a foreign debt of $100 billion and has had a growing problem of meeting debt payments due to the falling price of oil since 1981. Seventy-five percent of Mexico's revenues are in oil, which is a state-owned monopoly. Mexico has the fifth largest oil reserves in the world (Sinkin, 1986). There has been a 5 percent drop in GNP since 1983, with no prospect of economic growth. Real wages have fallen 50 percent in three years (Castaneda, 1985). Unemployment is at 26 percent, and steady employment is at 50 percent. Eight hundred thousand new jobs per year are needed just to keep up with the growth in the labor force. Inflation is at 65 percent. Mexico has the worst distribution of income in the western hemisphere (Sinkin, 1986).

Castaneda (1985) predicts that Mexico will come through its economic crisis, if it will (1) modernize trade, (2) achieve relief on the debt, (3) democratize political and social institutions and (4) return to a highly nationalistic, progressive foreign policy in Central

America and the Caribbean. Further, Castaneda warns that very little can be achieved without United States' support, but even less can be done if that support is too obtrusive.

The Hispanic Socioeconomic Cycle

A Hispanic student is often caught in a self-perpetuating, self-defeating cycle. Generally, she or he is born to parents who have low level occupations or who are unemployed. This leads to a childhood of poverty, poor health, overcrowding, and poor housing. This in turn is conducive to low school achievement and to the likelihood of dropping out of school. In this way, a new young adult with a low level of education and thus a low level occupation or unemployment is created. The cycle continues. Arciniega describes the dim outlook:

> This group is overrepresented in the lowest socioeconomic stratum of the nation's population. Moreover, their economic prospects are not very promising as poverty is predicted to be a way of life for a disporportionate number of Chicanos throughout the remainder of the 20th century (1982, p. 126).

Mexican Americans have a lower average level of education than Anglos. (Many of the statistics in this section of the literature review

refer to Mexican Americans or Chicanos because they describe demography of the Southwest United States. Cubans and Puerto Ricans are excluded when these terms are used.) Mexican Americans' median number of years of schooling completed is nine, as compared to an Anglo median of 12.4 years. Only seven years of education have been completed by 65 percent of Mexican Americans (Arciniega, 1982). Mexican Americans earn an average of 72 percent as much as Anglos earn, and 39 percent of all Mexican American children under the age of 18 are poor. From 1980 to 1984, the percentage of poor Mexican Americans increased 26 percent (Ruiz, 1986). Unemployment in 1982 for Mexican Americans was 15.2 percent, as compared to 10.7 percent for the nation (Davis, et al., 1983).

Poverty conditions include overcrowding (25 percent of Mexican Americans live in crowded conditions as compared to 6.7 percent of Anglos), poor housing, and poor health. Malnutrition is high, 90 percent of Mexican Americans have never seen a dentist, and 35 percent of Mexican Americans have no insurance. Life expectancy of Mexican Americans is 59, whereas life expectancy of Anglos is 72. Life expectancy of Mexican American farm workers is 49 (Arciniega, 1982).

These conditions are exacerbated by the high fertility rate of Mexican American women.

The lower level of parental education combined with conditions of poverty commonly create a home where education is not a priority. There is no place to study, no one to encourage achievement, and often insufficient money to allow the student the luxury of remaining in school. The situation is conducive to low achievement. The final limiting factor is that the Mexican American child often does not speak English, nor does anyone in his home. If she or he is lucky enough to be a third generation American, the family may have switched to English (Duran, 1983). The student is retained in one or more grades while learning English; 9 percent of Mexican American students are two grades below the grade level for their ages (Davis, et al., 1983). Limited English proficiency is commonly listed as one of the principle reasons for poor achievement of Mexican American students, but that reasoning is also inconclusive:

> Cuban Americans maintaining the highest usage rates of Spanish and the most intensive Spanish-speaking background among Hispanic subgroups suggests that familiarity with a non-English language is not necessarily a hindrance to Hispanics' education attainment (Duran, 1983, p. 109).

Other factors which exacerbate the low school achievement of Mexican Americans are low self-concept and teachers' low expectations. These two factors cause and are caused by the limited English proficiency and recidivism. The student feels out of place, and there is very little to cause her or him to have high education aspirations. She or he perceives the school climate to be hostile, and so the student often copes through non-participation.

It is not surprising that Mexican American students drop out of school in large numbers. Between 50 and 55 percent of Mexican Americans do not graduate from high school, while 12-16 percent of Anglos do not graduate (Arciniega, 1982; Davis, et al., 1983; Duran, 1983; & Parnell, 1985). Parnell also noted that 40 percent of Mexican Americans never complete 10th grade. Reasons given by Davis, et al. (1983) for Mexican American high school attrition were these: Mexican Americans are often enrolled in a grade below the grade level for their ages, it is considered "macho" to drop out, need to work, pregnancy, discrimination, limited English, and overcrowded schools. Parnell (1985) added these reasons: irrelevant vocational curriculum, lack of adequate counseling, lack of adequate support services, work ethic of

Hispanic males, and low expectations. Takesian (1967), in a study comparing Mexican American high school graduates and dropouts, found the graduates had fewer siblings, better parent occupations, superior English speaking ability, higher school achievement, and higher reading levels than the dropouts.

Hispanics in Higher Education

Hispanics are not well represented in higher education, and research is inconclusive as to whether their numbers are increasing. According to Lopez, Madrid-Barela, and Macias, "Chicanos are a very recent phenomenon in higher education. As late as 1968 most campuses had no Chicanos enrolled, and those campuses in areas of Chicano population concentration had as few as five or six enrolled" (1976, p. 5). Hodgkinson (1983) reports that 5 to 15 percent of Hispanics enter college. In California, Hispanic students make up 5 percent of the total college enrollment and 11.4 percent of the community college enrollment. However, between 1970 and 1980, Hispanic college enrollment increased 185.8 percent (Ruiz, 1986). Brown and Stent are more pessimistic as they write this prediction:

> We will conclude that over the next decade the Hispanic American college enrollment will remain steady at about 1.5 percent. There is little evidence to indicate that there will be an increase in the percentage over the next several years; in fact we expect a slight decline (1977, p. 55).

Hodgkinson also forecasts pessimistically that colleges could experience a 50 percent decline in enrollment of minorities if minorities continue to do poor work in high school and if they continue to drop out of high schools in large numbers.

Poor academic preparation and dropping out of high school are two major reasons Hispanics enroll in colleges in very small numbers. Other reasons are lack of finances and insufficient financial aid, lack of familiarity with a life style of study, poor performance on entrance exams, inadequate recruitment on the part of colleges, and inadequate counseling on the part of high school counselors (Lopez, et al., 1976; Olivas, 1980; Ortiz, 1982; & Ruiz, 1986). High school and junior high counseling are particularly critical, as these counselors tend to counsel minorities into minority curriculum, vocational technical tracks, and other low aspiration career plans (Chahin, J., personal communication, June, 1986; Olivas, 1980; & Ortiz, F.I., personal communication, June, 1986). According to Davis, et al. (1983),

Hispanic students' scores on the Scholastic Aptitude Test for college entrance are as follows: on the verbal part, they average 372, as compared with an average score of 442 for Anglo students, and on the math part, Hispanic students average 413 as compared with an average score of 482 for Anglo students.

For the Hispanic student who elects to enroll in higher education, her or his choices are limited. Primarily she or he is limited by admission standards, cost, and availability of financial aid. Many Hispanic students are unable or unwilling to go to college far from home, and many are neglected by colleges which have no special Hispanic recruitment or counseling. For these reasons, Hispanic students are underrepresented in four-year colleges and universities, but disporportionately overrepresented in two-year colleges, except in New Mexico (Dolman, 1984; Lenth, 1985; Kaufman, 1983; and Rendon, 1982). Olivas (1981) reports that in 1978, 42 percent of Hispanic college students attended community colleges whereas 23 percent of Anglo college students attended community colleges. Davis, et al., (1983) reported that in 1980, 54 percent of Hispanic college students attended community colleges whereas 36 percent of Anglo college

students enrolled in community colleges. In Texas, 75 percent of Hispanic college students attended community colleges, and in California, 82 percent of Hispanic college students attended community colleges (de los Santos, et al., 1980 and Yates, 1986). Hispanics make up 6.4 percent of all full time community college students (de los Santos, 1982) and they make up 1.5 percent of all college students, as mentioned above.

Hispanics feel they lack control in higher education because of employment practices, financial aid dispersement, and state appropriations. Olivas insists, "Hispanics have not controlled political or organizational structures of education, but have been held in subordinate status by post secondary institutions" (1981, p. 25). Financial aid is also attacked by Olivas, "Community college students have approximately the same volume of resources spent on them and receive about as much subsidy as their counterparts at senior public institutions, but Hispanic students' packages have a 10 percent higher proportion of loans (must be repaid)," (1981, p. 15).

The main discrimination, Hispanics feel, is in positions of power. Ortiz (1982) reports that there are fewer than 1 percent of all tenured

professors who are Hispanic and fewer than 3 percent of all tenured lecturers who are Hispanic. Olivas (1981) reporting on community colleges in particular, says there are 16 Hispanic community college presidents, 0.6 percent Hispanic community college trustees, 1.1 percent Hispanic coordinating board commissioners, and 1.4 percent full time Hispanic faculty. In the five Southwestern states of Arizona, California, Colorado, New Mexico, and Texas, 2.3 percent of all community college administrators are Hispanic and 71.5 percent of the community colleges have employed no Hispanic administrators (Olivas, 1979). Valverde (1976) and Ortiz (1982) enumerate several ways that Chicanos are pre-empted from employment: not attending proper feeder universities, clustering into social science majors, exclusion from the "good ole boy" system, poor exposure, tokenism, and being considered viable only for "bilingual" positions. de los Santos, et al. (1980) states, "The number of Hispanic professionals in higher education has never come close to being proportional to the number of Hispanics in the total population or to the number of Hispanic students."

Hispanic students find community colleges accessible and hospitable. They offer the initial access to higher education and act as

a bridge to the university for transfer students. They are also more accessible to Hispanic faculty and administrators than are four-year colleges and universities. Through financial aid arrangements, support services, and retention strategies, community colleges help Hispanic students overcome social fears of an education environment (de los Santos, 1982).

Community colleges have failures as well as successes. According to Olivas (1979), community colleges try to promise too much to too many. They lack sufficient support services and informed counseling. In spite of retention strategies, attrition in community colleges is 12 percent higher than in four-year colleges. Olivas describes a typical Hispanic student: "Marginalization is a major danger, especially in attrition and nonparticipation data. Those who penetrate the system do so in a peripheral, nonthreatening fashion," (1981, p. 28). Hispanic students lack Hispanic role models--especially top level administrators; most Hispanic administrators are mid-level administrators. Hispanic faculty is rarely proportionate to Hispanic student populations, and non-Hispanic faculty are often insensitive to the needs of Hispanic students (Astin, 1985). Community colleges also

lack sufficient financial aid and recruitment strategies (de los Santos, 1982). Community colleges receive and distribute approximately 10 percent of the federal support provided through the three campus-based aid programs, far less than their proportion of enrollments (Washington Office of the College Board, 1984).

Programs and Strategies

There are many theories on student retention and attrition. Some deal with student characteristics, while others promote institutional strategies. Some of the most promising theories refer to student-institution interactions (Bean, 1982; Lenning, 1982; Pascarella, 1986; Smith, 1981; and Tinto, 1975, 1982, & 1987). Lenning (1982, p. 40-41) lists some interactive variables which have been found to assist in the prediction of student retention:

1. Student satisfaction
2. Social integration/peer group relations
3. Family-college relationship
4. Out of class interactions with faculty
5. Faculty concerns for students and teaching
6. Institutionally generated student development
7. Commitment to the college and graduation
8. Extracurricular involvement
9. Responsiveness to student complaints and expressed needs
10. Student expectations and realities

11.Academic program involvement and success
12.Learning-preferences and teaching-method congruence
13.Compatability between student and institutional values
14.Student body characteristics
15.Student participation in student services
16.Student ability and college demands
17.Student and comfortable environment

Community college strategies in this study concern student services, curriculum and instruction, and institutional policy. Although they are institutional strategies, some are also student-institution interactional strategies, and most of them promote one or more items on Lenning's list.

Student Services

Student services, to affect persistence of Hispanic students, must emphasize recruitment, financial aid, and academic support services. Special orientation activities, career counseling, and academic advising are also important. Recruitment must be done in a firm affirmative action manner for students, staff, board members, and commissioners. In recruiting students, a college needs an outreach and recruitment program to inform students and parents (Astin, 1982). Recruitment activities should inform students and parents about how the college will meet the needs of non-traditional students (Valverde, 1985). The college should recruit in Spanish and should use whatever

media is used by the community (Troike, Golub & Lugo, 1981). The use of Hispanic graduates is especially effective, according to Troike.

Adolphus (1984) and Opp & Colby (1986) recommend orientation sessions before college begins as well as at the beginning of each semester. They also advise colleges to give a clear outline of their services as well as expectations for students. Valverde (1985) says that effective orientation sessions are planned to meet the special needs of the non-traditional student.

More intensive academic advisement could facilitate higher course completion and persistence rates, according to Bers (1986). Academic advising and career counseling for Hispanic students need reshaping among junior high and senior high school counselors as well as college advisors and counselors. Junior and senior high school counselors tend to counsel minorities into minority curriculum such as vocational technical tracks and other low aspiration career plans (Chahin, J., personal communication, June, 1986; Olivas, 1980; Ortiz, A., personal communication, June, 1986). Community colleges also track minority students into low level studies and reduce their chances of obtaining pre-law, engineering, pre-medicine, science and technology degrees

(Ballesteros, 1982). McLean (1979) warns against using only test scores and grades in assessment of Hispanic students. Godbold (1979) recommends the use of counseling teams and peer counselors for assessment and prescription and for career advising. Hispanic college students most often begin and end their college careers in community colleges. Therefore, careful academic advising must be implemented concerning transferability of courses from the community college to the four-year college or university (Adolphus, 1984; Astin, 1982; Cohen, 1980; Lenth, 1985; and Rendon, 1981). This requires close communication and cooperation between the two-year and four-year colleges and between the high schools and the colleges in order to be sure the counselors and advisors have correct information (Adolphus, 1984; Astin, 1982). Astin further recommends that community colleges bring together their transfer students to expose them to the same kinds of intensive education and extracurricular activities available to students at four-year institutions.

Learning assistance programs or academic support programs are often included in successful integrated retention plans (Astin, A.W., 1982; Burnham, L., 1983; Duran, R.P., 1983; de los Santos, A.G., 1982;

Gravenberg, R., et al., 1985; McLean, H.V., 1979; Noel, L., 1985; Opp, R. and Colby, R., 1986; Payan, R. et al., 1983). Tutoring and peer tutoring are the type of support most often recommended. Other recommendations include organized study groups and classes in problem solving, study skills, test-taking skills, time management, and research skills.

Financial aid is an effective tool in increasing the retention of Hispanic students because so many Hispanic families live below the poverty level. McLean (1979) recommends financial aid in amounts sufficient for clothing and spending money as well as tuition. Astin (1982) reports research which shows that holding a full time job has unfavorable effects on college students, and he recommends work study grants which are less than half-time work and are on campus. He further reports that the effects of grants and scholarships are generally positive, whereas the effects of loans are mixed. Olivas (1981) reports that community college students receive proportionate amounts of financial aid, but a 10 percent higher proportion of loans (must be paid back) than the general college population. In 1970, El Plan de Santa Barbara stated that ideally a Hispanic student should be

able to obtain a 100 percent grant his first year in college and then a 75 percent grant and 25 percent loan his second year.

Curriculum and Instruction

Just as student services need to be modified to affect retention of Hispanic students, curriculum and instruction also needs careful evaluation and adaptation to needs of Hispanic students. For example, Hispanics have a higher-limited-English-proficiency rate than most other language minority groups, according to Oxford-Carpenter, Pol, Lopez, Stupp, Gendell and Peng (1984). Curriculum and instruction items most often debated in the literature are bilingual education, ethnic studies, and developmental education.

Ever since the Bilingual Education Act was introduced in 1967 by Texas Senator Ralph Yarborough, experts in bilingual education have disagreed on the value and methods of bilingual education. Bilingual education, defined as a program of instruction which uses two languages for instruction, one of which is English, was requested and granted as a means of correcting over-reliance on recidivism due to limited English proficiency. Research has not proven whether bilingual education produces the results that its proponents claim:

> The impact and presence of bilingual education on Mexican Americans' language capabilities is as yet unclear due to the difficulties of carrying out programs and appraising their effects on education outcomes (Duran, 1983, p. 25).

Troike (1978, p. 4) states, "Quality bilingual programs work; if they do not, then something is wrong with the program."

Troike believes that Spanish reading proficiency leads to English reading proficiency, and that therefore an immigrant child should be taught in his native language through grade five. He bases this on studies which show that students who immigrate after sixth grade do better than students who immigrate before sixth grade. Cummins (1979 &1984) and Llanes (1983) also endorse a slow exit from bilingual education and state that the development of language-two is partially a function of the type of competence already developed in language-one. Cummins stresses that the teacher and student must consider the learning of English as an additive rather than a subtractive development. Perception of the learning of English as an additive obviates any possible fear of loss of the Spanish language, because it is understood that the new language skill is an addition rather than a substitution.

Educators who oppose a slow exit from bilingual curriculum and

instruction claim that the "immersion method" is the best way to learn a new language. In this method, a student is totally immersed in the new language and must learn it to survive. He hears none of language-one. Ramirez, Macaulay, Gonzalez, Cox & Perez (1975) qualify the success reports of the immersion method by saying it is successful with middle class students who have active parental support. This is often not the case with many Hispanic students. A compromise of several years of traditional language instruction followed by a year of total immersion is best (Ramirez et al., 1975). Success stories often concern Canadian or north European children or Hispanic children from middle or upper class homes with parents actively involved in their children's education. Llanes (1983, p. 4) states, "In the cases of children whose first language was the society's dominant language, a program of total immersion in the second language was successful....With linguistic minority children, the reverse is true." Oxford-Carpenter et al. (1984) add that the greater the proportion of non-English-language-background people in a community, the higher the limited-English-proficiency. Effectiveness of bilingual education varies with the background of the child--for example, the needs of an

immigrant child will differ from the needs of a fourth or fifth generation Mexican American child (Rippey, 1987, personal communication). Llanes (1983, p. 7) summarizes, "Sociocultural variables influence the outcomes of bilingual education. This theme recurs in practice and in research.

Another curriculum and instruction strategy upon which there is not agreement is ethnic studies. In 1970, the writers of El Plan de Santa Barbara demanded not only ethnic courses but also an ethnic studies major in California colleges and universities. Over the last 16 years, interest has waned, and now requests are most often for ethnic courses. Astin (1982) lists availability of such courses as having a positive effect on the retention of Hispanic students.

Curriculum experts debate the value of developmental courses (Adolphus, 1984; Astin, 1982; Godbold, 1979; Opp & Colby, 1986; and Valverde, 1985), and differ as to method of placement, instruction, and evaluation. Since 1978, 44 percent of all post-secondary institutions have reported a 10-30 percent increase in remedial course enrollment, and 19 percent of these institutions have reported a greater than 30 percent increase. The proportions are consistently higher in two-year

institutions, compared to four year institutions (Lenth, 1985). Moore and Carpenter (1985) state that educators lack consensus on mandatory assessment and placement, credit, and the value of developmental and remedial courses. Learning centers or labs which emphasize individual instruction rather than formal classes are endorsed by Baker and Painter (1983), Godbold (1979), and Valverde (1985). Instruction is competency based and self-paced, and follows thorough assessment and diagnosis. This assessment and placement should be mandatory (Cohen, 1984; McCabe, 1981; Noel, L.,1985; Opp & Colby, 1986; and Roueche, Baker & Roueche, 1984), although more colleges have mandatory assessment than mandatory placement (Roueche et al.,1984). Credit is given for successful completion of remedial and developmental courses, but generally the credits do not apply toward graduation. Adolphus (1984) states that adequate remedial and developmental courses plus recognition of completion of the courses are proven strategies which positively affect the retention of Hispanic college students.

One of the most important elements of curriculum and instruction is staff development concerning Hispanic sensitivity. Astin (1982) and

J. Chahin (June, 1986, personal communication) state that faculty attitude is the chief barrier to Hispanic success and persistence. Staff who are sensitive to students' needs and who are culturally knowledgeable are conducive to great success for the minority student (Astin, 1982; Gilbert, 1979; Jackson, 1979; McLean, 1979; & Noar, 1976). Godbold (1979) recommends faculty attitude adjustment through in-service training workshops, availability of literature, and funds for attending pertinent conferences. McLean (1979) advises that staff development include staff in admissions offices.

Institutional Policy

Institutional policy on the education of Hispanic students of a community college can be a major barrier or a major catalyst for increasing persistence. Policy on an ethnic or racial issue is most often evaluated through observation of written mission statements, composition of staff, and funding.

A mission statement should commit the entire institution to enhancing the welfare of Hispanic students (Gilbert, 1979). Especially important is commitment at the commanding executive officer level and thus strong and continuous program leadership (Adolphus, 1984).

Valverde (1985) describes an institutionwide intervention strategy for increasing student retention which calls for the faculty to change curricula and teaching methods and for the administration to change attitudes through new mission statements and modification of admissions criteria. Jackson (1979) advocates a more specific policy change: make all courses of study available to the entire clientele--courses such as health related courses, sciences, and transfer courses. Written policies indicate concern, and lack of them indicate indifference or prejudice. Astin (1982) states that one of the chief barriers to the success of Hispanic students is institutional indifference.

Institutional indifference and prejudice are most evident when one studies the ethnic composition of a college faculty and staff. Hispanic students lack Hispanic role models, especially among top level administrators (de los Santos, 1982; Godbold, 1979; & Jackson, 1979). Olivas (1979) confirmed this with his research which indicated that in Arizona, California, Colorado, New Mexico, and Texas, only 2.3 percent of all college administrators were Hispanic, and that 71.5 percent of the colleges in these five states had no Hispanic administrators at all.

In 1981, Olivas stated in a report on all community colleges in the United States, that there were 16 Hispanic presidents, 1.4 percent Hispanic full time faculty, .6 percent Hispanic trustees, and 1.1 percent Hispanic coordinating board commissioners. Institutional policy should promote appointing Hispanics in all positions in community colleges. For example, minority staff should be employed to operate and manage minority services. Promising Hispanic faculty should be identified and groomed for administrative positions. Hispanic support staff should be promoted proportional to Hispanic student enrollment. Writers of El Plan de Santa Barbara (1970) demanded Hispanic staff in proportion to the Hispanic student enrollment and also total Hispanic input and staff concerning ethnic courses of study. Astin (1982) stated that faculty composition is one of the chief barriers to the success of ethnic and racial minority students.

Administrative policy can be evaluated by looking at its funding of Hispanic research, library offerings, social functions, and staff development. Funds are needed for research into the needs of Hispanic students and into successful programs or strategies (Godbold, 1979 and Troike, 1978). Astin (1982) states that there is a need for research

into bilingual skills and instructional methods used in bilingual education. The Chicano Coordinating Board, in El Plan de Santa Barbara (1970), also requested funds for Hispanic research. There has been a dearth of retention studies for special subgroups such as racial/ethnic groups, according to Astin (1975), Lenning (1982), and Rendon (1982).

CHAPTER 3

METHOD

A review of the literature in Chapter 2 points to a need for community colleges to increase commitment to serve Hispanic students. Schools are now heavily enrolled with Hispanic students. For a variety of social and economic reasons this country is becoming very dependent on the success of these minority youth. Community colleges must develop effective retention strategies in order to educate and train future leaders and our future work force. These strategies fall into three main categories: institutional policy, student services, and curriculum and instruction. Under institutional policy are strategies such as written commitment, staff composition, and funds for Hispanic research and conventions. Under student services are strategies such as recruitment, financial aid, academic advising, orientation, academic support services and career counseling. Finally, under curriculum and instruction are strategies such as bilingual education or ESL, ethnic courses, mandatory assessment and placement, developmental education, and staff development. The greatest deficiencies, according to the literature, seem to be in financial aid, faculty attitude, and staff

composition.

This study explored differences among selected community colleges as they plan strategies to meet the needs of Hispanic students. Hispanic students' needs revolve primarily around lack of academic preparedness, lack of adequate finances, and lack of acceptance of Hispanic cultural interests and characteristics by Anglo Americans. Hispanic students have a higher attrition level than Anglo students, and they experience less success in transferring to four year institutions. College success at overcoming these deficiencies was analyzed. College strategies were compared for relationship to retention.

Subjects

The population in this study consisted of 145 community colleges in the border states of Arizona, California, New Mexico, and Texas. There were 11 community colleges in Arizona, 74 in California, 15 in New Mexico, and 45 in Texas (Chronicle of Higher Education, 1986). These colleges were chosen because they are in states which generally have large Hispanic student populations. They are similar for that reason and for the reason that each has a variety of socio-economic

groups among its student body. The colleges are different because they are in four different states and thus are under different governing boards. They are also different because of different histories of working with Hispanic students and because they are in communities which vary widely in ethnic composition..

Procedure

Questionnaires were mailed to presidents at 145 community colleges in Arizona, California, New Mexico, and Texas to obtain data regarding institutional policies, student services, and curriculum and instruction, which have been specifically targeted at Hispanic retention. Other data to be obtained was retention rate for Hispanic students and retention rate for the general student population at each college. Colleges with the highest Hispanic retention rates and Hispanic retention rates closest to general population retention rate would be assumed to have retention strategies that are effective. The relationships between general retention rates and college retention strategies were also compared.

Instrumentation

The questionnaire used was an adaption of a questionnaire developed in 1981 by Lee Noel and Randi Levitz for The American College Testing Program, Survey of Campus Services for Academically Underprepared Students. Their survey was used to prepare a report entitled "What Works with Academically Underprepared Students." L. Noel, R. Levitz and D. Saluri also edited Increasing Student Retention in 1985.

College retention strategies in the questionnaire were derived from a list of the strategies most often recommended in the literature. Some of the strategies were taken from a 1970 list of requests by the Chicano Coordinating Council on Higher Education in California, El Plan de Santa Barbara. Only items which could be tied to variables of this study were used.

The questionnaire consisted of three parts, all sent to presidents of community colleges. The president was asked to disseminate the parts in the following manner:

Part I Institutional Policy to the registrar

Part II Student Services to the dean of student services

Part III Curriculum and Instruction to the academic dean

The questionnaire was field tested with six community colleges. The questionnaire was reviewed for clarity and distribution of responses and then revised.

Research Design

This study employed an ex post facto design that tested the four research questions. The design included 14 independent variables: (1) written commitment to education of Hispanic students in a mission statement, (2) proportional ethnic composition of faculty and staff, (3) funds for research and attending conferences about the needs of Hispanic students, (4) recruitment of Hispanic students, (5) special orientation, (6) academic advising about transferability of courses, (7) career counseling into selective programs, (8) academic support services, (9) proportional financial aid, (10) bilingual programs and/or ESL courses, (11) Hispanic ethnic course offerings, (12) developmental education classes, (13) mandatory assessment and placement, and (14) staff development on sensitivity to problems of Hispanic students. These variables were analyzed for their relationship to the dependent

variable, retention of Hispanic students or retention of general student body.

For question 1, all the variables were combined in a simple correlation, to determine the significance of the relationship of each independent variable to Hispanic retention and to general retention. Analysis of variance and correlation were used for analyses of questions 2 through 4. All data were analyzed using the Statistical Package for the Social Sciences (SPSS^X, 1988). Details of analyses of the various questions are as follows:

1. Question 1 was analyzed using Pearson correlation to determine the significance of the relationship of each independent variable to retention.

2. Question 2 was analyzed with analysis of variance and Pearson correlation to determine the extent to which retention of Hispanic students is related to a college employing the following institutional policies on commitment to education of Hispanic students:

(a) a written mission statement concerning Hispanic students

(b) proportional ethnic composition of faculty and staff

(c) funding of research and travel for conferences about the needs

of Hispanic students

3. Question 3 was analyzed employing analysis of variance and Pearson correlation to determine the extent to which retention of Hispanic students is related to a college offering the following student services:

(a) recruitment of Hispanic students

(b) special orientation

(c) academic advising about transferability of courses

(d) career counseling into selective programs

(e) academic support services

(f) proportional financial aid

4. Question 4 was analyzed employing analysis of variance and Pearson correlation to determine the extent to which retention of Hispanic students is related to a college offering the following special curriculum and instruction strategies:

(a) staff development on sensitivity to needs of Hispanic students

(b) Hispanic ethnic course offerings

(c) developmental education course offerings

(d) mandatory assessment

(e) mandatory placement

(f) bilingual programs

(g) ESL courses

The last four independent variables in the curriculum and instruction category were derived from the two compound variables, (1) mandatory testing and placement and (2) bilingual programs and/or ESL courses, for ease in coding and analyzing.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The purpose of this study was to investigate the relationship between community college retention strategies and Hispanic student retention rate. Presented in this chapter is a description of the study's results.

Questionnaires were sent to community colleges having 5.0 percent or more Hispanic enrollment to obtain a measure of the following independent variables: (1) written mission statement concerning Hispanic students, (2) ethnic composition of faculty and staff, and (3) funds for research and attending conferences about the needs of Hispanic students (4) recruitment of Hispanic students, (5) academic advising about transferability of courses, (6) orientation, (7) career counseling, (8) academic support services, (9) financial aid, (10) bilingual programs or ESL, (11) Hispanic ethnic courses, (12) developmental education courses, (13) mandatory assessment and placement, and (14) staff development on sensitivity to problems of Hispanic students. The dependent variables in this study were Hispanic student retention and general student retention.

Data were collected to answer the following questions:

1. Does retention vary with strategies to meet the needs of Hispanic students?

2. To what extent is retention related to whether a college has the following institutional policies on commitment to the education of Hispanic students:

(a) a written mission statement concerning Hispanic students

(b) proportional ethnic composition of faculty and staff

(c) funds for research about the needs of Hispanic students.

3. To what extent is retention related to whether a college offers the following student services:

(a) recruitment of Hispanic students

(b) academic advising about transferability of courses

(c) special orientation

(d) career counseling into all level careers

(e) academic support services

(f) proportional financial aid

4. To what extent is retention related to whether a college offers the following curriculum and instruction strategies:

(a) staff development on sensitivity to problems of Hispanic students.

(b) bilingual programs and/or English as a Second Language (ESL)

(c) Hispanic ethnic course offerings

(d) developmental education course offerings

(e) mandatory assessment and placement

To answer these questions, analysis of variance and correlation procedures were used to examine the relationships of the variables. Distribution, central tendency, and dispersion are presented for all variables to provide information regarding the strategies.

Data were compiled, formatted, and analyzed using the Statistical Package for the Social Sciences (SPSS^X, 1988). Correlations were assumed to indicate relationships if significance levels were $p < .05$. The data are presented as follows: Descriptive Analysis, Pearson Correlation, and Analysis of Variance.

Table 2

Summary of Size Distribution of Subject Colleges

Credit Enrollment	Frequency	Percent
<1000	7	8.0
1001 - 5000	33	37.5
5001 - 10,000	15	17.0
10,001 - 15,000	16	18.2
15,001 - 20,000	8	9.1
>20,000	9	10.2

Table 3

Summary of Hispanic Enrollment Distribution in Subject Colleges

Percent Hispanic Enrollment	Frequency	Percent
5 - 14%	54	62.1
15 - 24%	13	14.9
25 - 34%	5	5.8
35 - 44%	2	2.3
45 - 54%	5	5.7
55 - 64%	4	4.6
65 - 74%	1	1.1
75 - 84%	1	1.1
85 - 94%	2	2.3

Figure 1

Distribution of Hispanic Enrollment in Subject Colleges

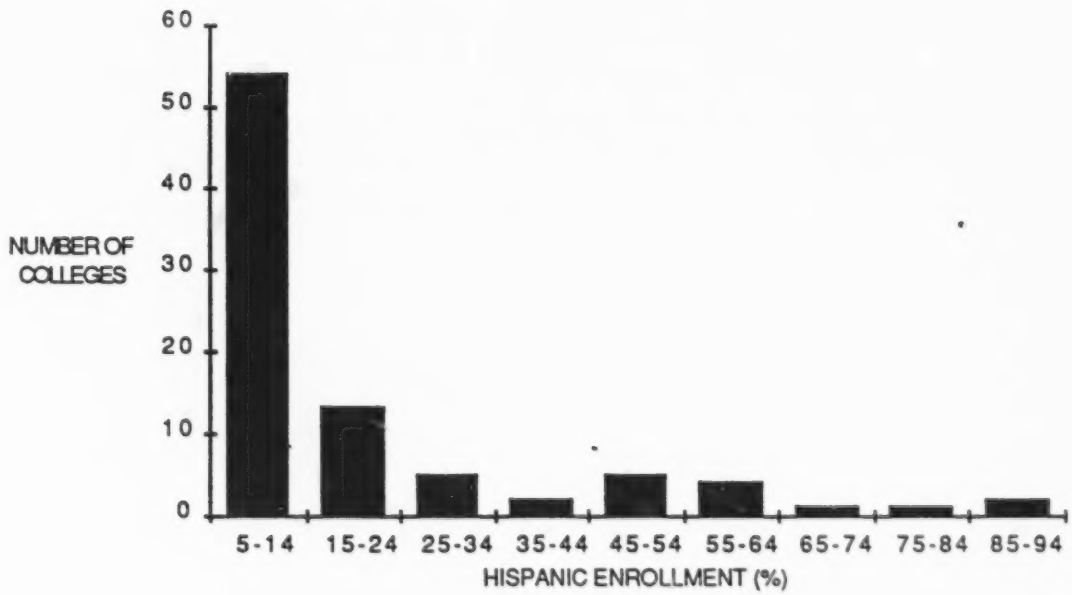


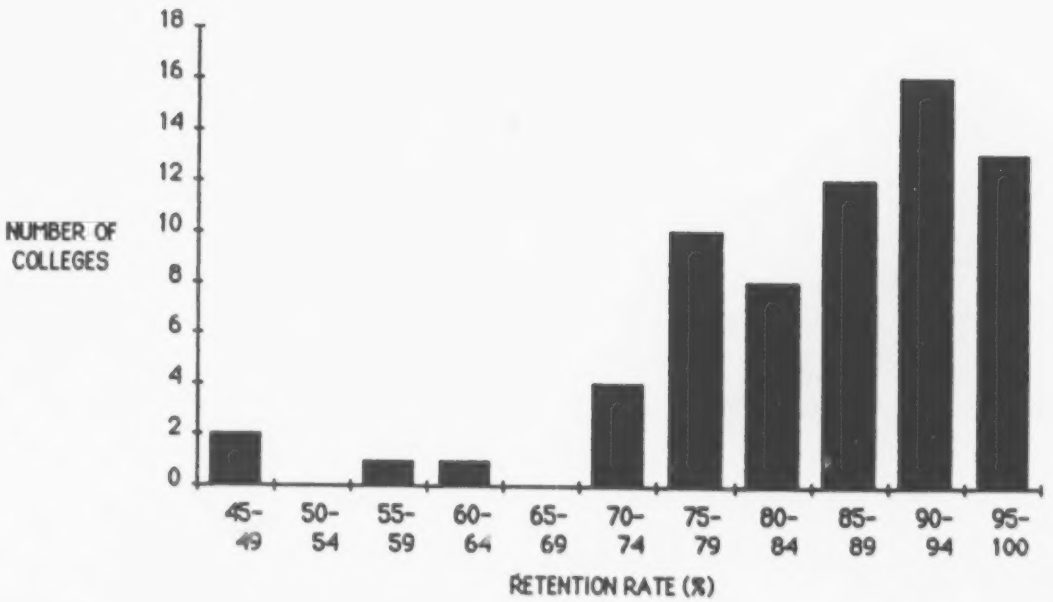
Table 4

Summary of Distribution of General Student Body Retention Rates in Subject Colleges

Retention Rate	Frequency	Percent
45 - 49%	2	3.0
50 - 54%	0	0.0
55 - 59%	1	1.5
60 - 64%	1	1.5
65 - 69%	0	0.0
70 - 74%	4	6.0
75 - 79%	10	15.0
80 - 84%	8	12.0
85 - 89%	12	18.0
90 - 94%	16	24.0
95 - 100%	13	19.4

Figure 2

Distribution of General Retention Rates in Subject Colleges.



with a range of 2 percent to 52 percent per semester. This dispersion is skewed as illustrated in figure 2. Table 5 shows that Hispanic withdrawal rate averaged 11.2 percent and ranged from 1 percent to 39 percent. This dispersion is skewed as shown in figure 3.

Table 6 shows that more than half the colleges used the following strategies: academic advising about transfer, career counseling into all programs, academic support services, ESL programs, developmental education, and mandatory assessment and placement. The least commonly used strategies were proportional Hispanic staff, special orientation for Hispanic students, Hispanic students mentioned in the college mission statement, and funds for Hispanic research and/or conferences.

Table 5

Summary of Distribution of Hispanic Retention Rates in Subject Colleges

Retention Rate	Frequency	Percent
60 - 64%	1	2.6
65 - 69%	0	0.0
70 - 74%	0	0.0
75 - 79%	4	10.5
80 - 84%	5	13.2
85 - 89%	7	18.4
90 - 94%	12	31.6
95 - 100%	9	23.7
Total	38	100

Figure 3

Distribution of Hispanic Retention Rates in Subject Colleges.

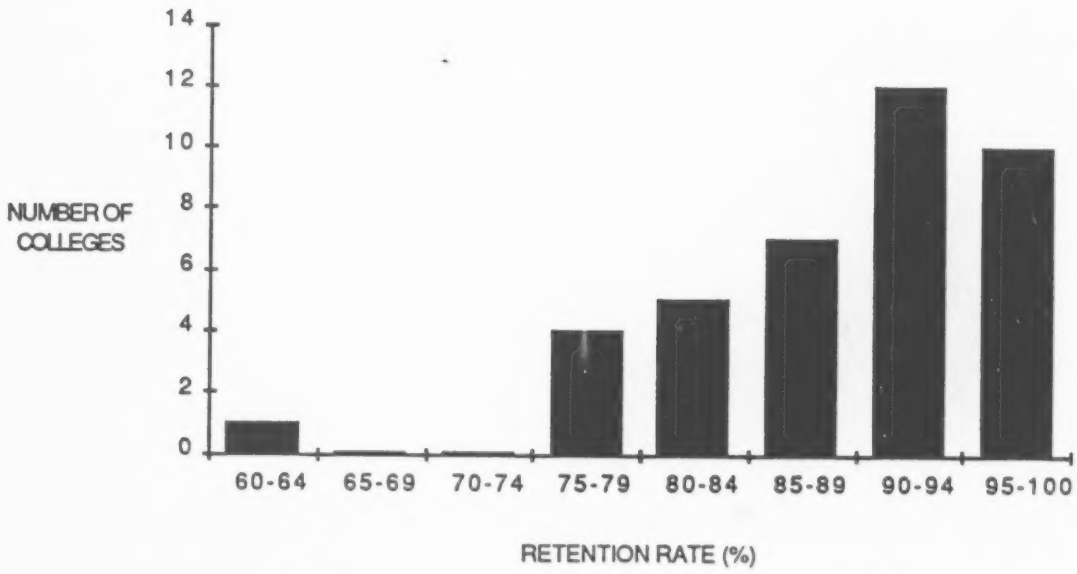


Table 6A

Independent Variables - Percent of Sample Responses (All responders)

Variable	% "yes"	% "no"	%-n/a
Hispanic Recruitment	50.0 (44)	45.5 (40)	5.5 (4)
Financial Aid	37.5 (33)	37.5 (33)	25.0 (22)
Academic Advising	92.0 (81)	3.4 (3)	5.5 (4)
Orientation	21.5 (19)	72.7 (64)	5.7 (5)
Career Counseling	70.5 (62)	21.5 (19)	8.0 (7)
Academic Support	88.6(78)	6.8(6)	4.5(4)
Bilingual Courses	38.6 (34)	61.4 (54)	0
ESL Courses	55.6 (49)	44.3 (39)	0
Hisp. Ethnic Courses	50.0 (44)	50.0 (44)	0
Dev. Courses	100. (88)	0	0

Note. Number of responses is shown in parentheses.

Table 6A continued

Variable	% "yes"	% "no"	%-n/a
Mandatory Assessment	89.8 (79)	10.2 (9)	0
Mandatory Placement	64.8 (57)	35.2 (31)	0
Staff Development	37.5 (33)	62.5 (55)	0
Hispanic in Mission Statement	6.5 (5)	70.5 (62)	23.9 (21)
Hispanic Staff Comp.	11.4 (10)	78.4 (69)	10.2 (9)
Research Funds	21.6 (19)	65.9 (58)	12.5 (11)

Note. Number of responses is shown in parentheses.

Table 6B

Independent Variables - Percent of Sample Responses (Responders with Hispanic retention data)

Variable	% "yes"	% "no"	%-n/a
Hispanic Recruitment	44.7(17)	47.4(18)	7.9(3)
Financial Aid	44.7(17)	28.9(11)	26.3(10)
Academic Advising	86.8(33)	2.6(1)	10.5(4)
Orientation	15.8(6)	73.7(28)	10.5(5)
Career Counseling	73.7(28)	18.4(7)	7.9(3)
Academic Support	84.2(32)	5.3(2)	10.5(4)
Bilingual Courses	34.2(13)	65.8(25)	0
ESL Courses	44.7(17)	55.2(21)	0
Hisp. Ethnic Courses	42.1(16)	57.9(22)	0
Dev. Courses	100.(38)	0	0

Note. Number of responses is shown in parentheses.

Table 6B continued

Variable	% "yes"	% "no"	%-n/a
Conference Funds	28.9(11)	5.2(2)	65.8(25)
Mandatory Assessment	89.5(34)	10.5 (4)	0
Mandatory Placement	63.2(24)	36.8(14)	0
Staff Development	31.6(12)	68.4(26)	0
Hispanic in Mission Statement	5.3(2)	68.4(26)	26.3(10)
Hispanic Staff Comp.	2.6(1)	92.1(35)	5.3(2)
Research Funds	18.4(7)	68.4(26)	13.2(5)

Note. Number of responses is shown in parentheses.

Tables 7-9 show means and standard deviations of the dependent variables (Hispanic student retention and general student retention) broken down by the independent variables (college retention strategies).

Table 7

Means and Standard Deviations for Percent Hispanic and General Retention by Strategies to Increase Retention

Part One - Administrative Policies Strategies

Strategies	Hispanic Retention N = 38		General Retention N = 88	
	Mean Percent	St. Dev.	Mean Percent	St.Dev.
Mission Statement				
a. Hispanic students mentioned	85.0000	4.2426	74.2500	17.8955
b. Culturally different mentioned	87.7857	7.6979	83.6786	11.6303
c. High risk mentioned	87.1111	10.8679	87.4000	10.6165
d. Other	88.7500	4.3493	91.8333	3.6009
e. No answer	92.3000	6.7007	89.6667	7.0373
Hispanic Research Funds				
a. No	90.2692	5.8609	86.4884	10.2965
b. Yes	79.7143	8.8452	80.8571	12.3964
c. No answer	92.6667	8.1404	91.1429	9.5469

Note: General Retention includes Hispanic Retention

Table 8

Means and Standard Deviations for Percent Hispanic and General Retention by Strategies to Increase Retention

Part Two - Student Services Strategies

Strategies	Hispanic Retention N = 38		General Retention N = 88	
	Mean Percent	St. Dev.	Mean Percent	St. Dev.
Hispanic Recruitment				
a. Yes	88.2353	7.0492	87.2727	6.9429
b. No	89.2222	8.9742	82.6333	13.9370
Transfer Advisement				
a. Yes	88.5294	7.9895	85.0167	11.1894
b. No	97.0000	0.0000	86.6667	8.3267
Special Orientation				
a. Yes	89.1667	6.5549	86.1667	7.0818
b. No	89.1379	8.0610	85.0980	11.7478
Career Counseling				
a. Yes	88.5000	7.997	86.1818	10.7125
b. No	89.0000	7.3872	83.1667	11.5517

Table 9

Means and Standard Deviations for Percent Hispanic and General Retention by Strategies to Increase Retention

Part Three - Curriculum and Instruction Strategies

Strategies	Hispanic Retention N = 38		General Retention N = 88	
	Mean Percent	St. Dev.	Mean Percent	St. Dev.
Staff Dev./Hispanic[a]				
a. Yes	90.6154	7.2519	83.9600	12.2184
b. No	87.6800	8.3552	85.9024	10.0742
Bilingual Education				
a. Yes	86.1538	10.6759	82.7143	12.1773
b. No	90.0385	5.9564	87.2308	9.6012
ESL Classes				
a. Yes	87.0000	10.0762	83.9000	11.3765
b. No	92.5000	3.6968	93.2500	2.6300

Note. General Retention includes Hispanic Retention.

a. Staff Dev./Hispanic means staff development concerning the needs of Hispanic students.

Table 9 continued

Strategies	Hispanic Retention N = 38		General Retention N = 88	
	Mean Percent	St. Dev.	Mean Percent	St. Dev.
Ethnic Classes				
a. Yes	83.6875	8.3962	83.8333	9.9554
b. No	92.7273	4.9970	86.6944	11.7347
Developmental Courses				
a. Yes	88.7436	7.9230	85.2576	10.9591
b. No	(none)		(none)	
Mandatory Assessment				
a. Yes	88.2857	8.1442	85.2373	11.2500
b. No	92.7500	4.4253	86.1250	8.3911
Mandatory Placement				
a. Yes	87.2400	8.8566	84.0476	12.5016
b. No	91.0000	5.0990	87.6667	7.3109

Note. General Retention includes Hispanic Retention.

Tests of Research Questions

The primary purpose of this study was to determine if there was a relationship between community college retention strategies and Hispanic student retention. Results from analysis of variance indicated that two significant differences in means existed, as noted below.

1. The relationship between strategy of funds available for Hispanic research and Hispanic student retention was significant at or below the .05 level ($p < 0.0015$), as shown in Table 10.

2. The relationship between the strategy of Hispanic ethnic classes and Hispanic student retention was significant at or below the .05 level ($p < 0.0006$), as shown in Table 11.

The above statistical analyses indicated that there was a significant relationship between community college strategies and Hispanic student retention.

The secondary purpose of the study was to determine if there was a relationship between community college retention strategies and general student retention. Results from analysis of variance indicated that two significant differences in means of general student retention existed.

Table 10

Test of the Relationship Between Funds Available and Hispanic Retention

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	Sig.
Between Groups	2	723.5586	361.7793	7.8370	.0015
Within Groups	36	1661.8773	46.1663		
Total	38	2385.4359			

Table 11

Test of the Relationship Between Ethnic Classes and Hispanic Retention

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	Sig.
Between Groups	2	803.6348	401.8174	9.1449	.0006
Within Groups	36	1581.8011	43.9389		
Total	38	2385.4359			

1. The relationship between the strategy of having a written mission statement concerning Hispanic students and general student retention was significant at or below the .05 level ($p < 0.0479$), as shown in Table 12.

2. The relationship between the strategy of academic support services to general student retention was significant at or below the .05 level ($p < 0.0411$), as shown in Table 13.

The above statistical analysis indicated that there was a significant relationship between community college retention strategies and general student retention.

Table 12

Test of the Relationship Between Mission Statement and General Student Retention

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	Sig.
Between Groups	4	1127.5603	281.8901	2.5605	.0479
Within Groups	58	6385.4238	110.0935		
Total	62	7512.9841			

Note. General Retention includes Hispanic Retention.

Table 13

Test of the Relationship Between Academic Support Services and General Student Retention.

Analysis of Variance

Source	D.F.	Sum of Squares	Mean Squares	F Ratio	Sig.
Between Groups	2	748.5534	374.2767	3.3589	.0411
Within Groups	63	7019.8860	111.4268		
Total	65	7768.4394			

Note: General Retention includes Hispanic Retention.

Significant Relationships Between College Strategies and Retention.

Relationships which were statistically significant at the .01 level were determined through a Pearson correlation, as shown in a correlation matrix in Table 14. College retention strategies with the highest relationship to Hispanic retention were: ethnic courses, mission statement concerning Hispanic students, proportional financial aid, bilingual education, career counseling into all level careers, ESL classes, and funds for attending conferences about the needs of Hispanic students.

College strategies with the highest relationship to general retention (included Hispanic retention) included: funds for attending conferences about the needs of Hispanic students, mission statement concerning Hispanic students, ESL classes, Hispanic student recruitment, bilingual education and proportional Hispanic staff.

Table 14
Correlation Matrix

- - - - - - - - - - - - - - - PEARSON CORRELATION COEFFICIENTS - - - - - - - - - - - - - -

	GENU	HISN	POLICY	PCTTOT	FUNDS	CONF	RECRUIT	TRANSF	ORIENT	CAREER	CLASSES
GENN	1.0000	-.8270**	-.2657	-.1880	-.1405	-.3870	-.2125	-.1531	-.0772	-.0844	-.2262
HISN	-.8270**	1.0000	.2718	.0666	.1526	.1985	.1043	.1117	.0394	.1324	.1554
POLICY	-.2657	.2718	1.0000	.0418	.2060	.1062	.0511	.0659	.0418	.2580	.0824
PCTTOT	-.1880	.0666	.0418	1.0000	.1658	.1861	.0179	.1222	.0535	.0455	.0871
FUNDS	-.1405	.1526	.2060	.1658	1.0000	.1756	.0458	.0952	.0475	.0914	.0441
CONF	-.3870	.1985	.1062	.1861	.1756	1.0000	.1555	.1072	.1101	.1241	.0733
RECRUIT	-.2125	.1043	.0511	.0179	.0458	.1555	1.0000	.6466**	.5650**	.2631	.6130**
TRANSF	-.1531	.1117	.0659	.1222	.0952	.1072	.6466**	1.0000	.5603**	.2140	.6593**
ORIENT	-.0772	.0394	.0418	.0535	.0475	.1101	.5650**	.5603**	1.0000	.3917**	.5420**
CAREER	-.0844	.1324	.2580	.0455	.0914	.1241	.2631	.2140	.3917**	1.0000	.2262
CLASSES	-.2262	.1554	.0824	.0871	.0441	.0733	.6130**	.6593**	.5420**	.2262	1.0000
FA	-.0224	.2513	.0758	.0717	.0674	.1814	.0781	.0418	.0729	.1678	.0322
STAFFDV	.0872	.1760	.1820	.0737	.0419	.3919	.0045	.0492	.0266	.0969	.0463
BILING	.2059	.2341	.0757	.2886*	.0163	.2872	.0403	.0192	.1815	.2136	.0163
ESL	.2429	.2303	.1219	.4208*	.1248	.0114	.1551	.0468	.0624	.0986	.0613
ETHNIC	.0936	.3222	.2426	.0129	.0201	.0275	.0071	.0418	.0598	.0764	.0429
COURSE	.0644	.	.0254	.0198	.0451	.1891	.0113	.0176	.0362	.0134	.0149
MANDA	.0266	.1732	.1028	.0855	.1023	.0480	.0419	.1629	.0659	.1006	.0714
MANDP	.0819	.0460	.1665	.1159	.0524	.1147	.0184	.0145	.0643	.3510**	.0123

* - SIGNIF. LE .01 ** - SIGNIF. LE .001 (2-TAILED, " . " PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

- - - - - - - - - - - - - - - PEARSON CORRELATION COEFFICIENTS - - - - - - - - - - - - - -

	FA	STAFFDV	BILING	ESL	ETHNIC	COURSE	MANDA	MANDP
GENN	-.0224	.0872	.2059	.2429	.0936	.0644	.0266	.0819
HISN	.2513	.1760	.2341	.2303	.3222	.	.1732	.0860
POLICY	.0758	.1820	.0757	.1219	.2426	.0254	.1028	.1665
PCTTOT	.0717	.0737	.2886*	.4208*	.0129	.0396	.0855	.1159
FUNDS	.0674	.0419	.0163	.1248	.0201	.0451	.1023	.0524
CONF	.1814	.3919	.2872	.0114	.0275	.1891	.0480	.1147
RECRUIT	.0781	.0045	.0403	.1551	.0071	.0113	.0419	.0184
TRANSF	.0418	.0492	.0192	.0468	.0418	.0176	.1629	.0145
ORIENT	.0729	.0266	.1815	.0624	.0598	.0362	.0659	.0643
CAREER	.1678	.0969	.2136	.0986	.0764	.0134	.1006	.3510**
CLASSES	.0322	.0463	.0163	.0613	.0429	.0149	.0712	.0123
FA	1.0000	.0042	.1634	.1188	.0974	.0295	.0604	.2387
STAFFDV	.0042	1.0000	.0536	.1370	.2271	.0843	.3019	.1384
BILING	.1634	.0536	1.0000	.2854	.0572	.0851	.0712	.0751
ESL	.1188	.1370	.2854	1.0000	.0854	.0540	.1278	.0544
ETHNIC	.0974	.2271	.0572	.0854	1.0000	.0628	.0301	.0061
COURSE	.0295	.0843	.0851	.0540	.0628	1.0000	.3389*	.0814
MANDA	.0604	.3019	.0712	.1278	.0301	.3389*	1.0000	.2036
MANDP	.2387	.1384	.0751	.0544	.0061	.0814	.2036	1.0000

* - SIGNIF. LE .01 ** - SIGNIF. LE .001 (2-TAILED, " . " PRINTED IF A COEFFICIENT CANNOT BE COMPUTED)

Analysis of Relationships Between Variables

Originally the analysis of relationships between variables was to have employed analysis of variance and regression analysis. Proceeding with the proposed regression analysis would have resulted in invalid findings for three reasons. Hispanic retention and general retention rates were negatively skewed across the population. There was significant collinearity among several of the predictor variables. The cell frequencies for several of the independent variables were insufficient.

Regression analysis requires that data be normally distributed for valid results. As Tables 4 and 5 demonstrate and figures 2 and 3 illustrate, the retention rates, which are the dependent variables in this study, were highly skewed.

Highly intercorrelated variables, invalidate a basic assumption of regression analysis. Tables 14 and 15 list several variables with high multiple correlations, and it is impossible to determine how such variables could affect Hispanic and general retention. Note (in Table 15) that some of the student services strategies (variables 7 through 12) were highly correlated. The letter, c, indicates a correlation of greater

Table 15
Problems of Cell Size and Intercorrelation Among Variables

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. GenW	c		*	*			*#	*	*		*	*			*	*#	*	*
2. HisW		#	*#	*	#	*	*#	*		*#		*				*#	*#	*
3. Mission																		
4. StaffC																		
5. Funds																		
6. Conf.																		
7. Recruit							c	c		c								
8. Advis								c		c								
9. Orient										c								
10.Career																		
11.Support																		
12.FinAid																		
13.StaffD																		
14.Biling																		
15.ESL																		
16.Ethnic																		
17.DevEd																		
18.MandA																		
19.MandP																		

c = > .50 R^2 between criterion variables or between predictor variables
* = < .20 R^2 between criterion and predictor variables
# = < 5 cell size

than .50.

Low cell frequencies was the third reason regression analysis was determined to be inappropriate. The number of negative and positive questionnaire responses are shown in Table 6, and response frequencies less than five are summarized in Table 15. A response or cell frequency of less than five significantly weakens the confidence of findings in regression analyses. The questionnaires which gave Hispanic retention data (N = 38) yielded low cell frequencies for seven of the strategies: mission statement concerning Hispanic students, proportional staff composition, academic advising regarding transfer, developmental education courses, academic support services, conference funds, and mandatory assessment. The total returned questionnaires (N = 88) yielded low cell frequencies for two of the strategies: academic advising reqarding transfer and developmental education courses.

Since regression analysis is inappropriate for the findings of this study, an analysis of relationships will have to substitute for an analysis of predictions.

CHAPTER 5

SUMMARY OF FINDINGS, DISCUSSION AND RECOMMENDATIONS

Overview

The purpose of this study was to investigate the relationship between community college retention strategies and retention rates for Hispanic students. A secondary purpose was to investigate the relationship between community college retention strategies and retention rates for general student bodies.

This study supports a conclusion that there was a positive relationship between five of the college strategies and Hispanic retention rates. However, strategies with significant relationships to retention differed for Hispanic student retention and general student retention. Two of the five strategies were related to both Hispanic and general retention. These two strategies were bilingual education and ESL classes.

Hispanic Student Retention. Strategies of offering proportional financial aid, career counseling into selective programs, bilingual education, ESL classes, Hispanic ethnic courses showed a relationship to Hispanic retention.

Most retention research can be divided into three major schools of

thought: studies of persistence and student traits, studies of persistence and college strategies, and studies of persistence and the compatibility of student traits with college strategies. The present study will add to the body of retention research regarding these three schools of thought.

Problems with community college retention studies include lack of retention record keeping, and lack of comparative data. A third problem is the myriad reasons for which students leave college. Finally, community colleges differ from four year institutions because of their diverse student bodies, thus making community college retention studies questionable. This study will pave the way for future retention studies by making community colleges aware of the need for keeping retention records on all ethnic and racial groups as well as on their general student bodies.

Retention Rate Discrepancy. There is a discrepancy between retention rates reported in the literature and retention rates in the findings of this study. The literature reports that 36 percent of Anglo community college students leave school before the end of their first year of college and that 56 percent of Hispanic community college students do so. Findings of this study showed that the general student withdrawal rate (includes

Hispanic student withdrawal rate) after one semester was 14.8 percent and that Hispanic student withdrawal rate was 11.2 percent. Because of this discrepancy, the appendix includes a list of retention rates as reported by each college in this study.

There are several reasons for this discrepancy in data. First and most important is that the literature retention rates are for one year, whereas this study reports on one semester. Furthermore, national data considers non-returning students to be withdrawals. This means that if a student does not return for a second semester or a second year, then he or she is counted as a withdrawal. Many community college students attend college for one or two semesters and then "stop out" for reasons such as financial or over-commitment or for the reason that they attained their objectives in that time. Community colleges do not consider these students to be withdrawals. In order to make a fair comparison, there must be a common definition of retention.

A second reason for the retention data descrepancy is variety in reporting students who make all grades of D and/or F. Some colleges report these students as withdrawals and other colleges do not. Some colleges advise instructors to record students who cease to attend

classes as failing, while other colleges advise instructors to record them as withdrawn. The latter colleges operate on the assumption that a student who makes all grades of D and/or F is not a participating student and should be considered to have withdrawn from college. Again, in order to make a fair comparison of retention data, there must be a common definition of retention.

A third reason for the retention data discrepancy is that questionnaires are subject to reporting error. The researcher is at the mercy of the person who answers the questionnaire. Furthermore, when persons receiving questionnaires are pressured into returning answers (through second mailings and telephone calls), then the answers are questionable.

Research Questions

Four research questions were posed in order to investigate the relationship between community college strategies and student retention. Each question will be restated, and the conclusion relevant to it briefly discussed in terms of behavioral explanations.

Research Question #1: Does retention vary with college strategies employed to meet the needs of Hispanic students?

Five strategies employed by community colleges were related to Hispanic retention rates. Hispanic retention rates were significantly related to proportional financial aid, career counseling into selective programs, bilingual education, ESL classes, and Hispanic ethnic courses.

Related findings concerning general student retention. Four strategies employed by community colleges were related to general student retention rates. General student retention was higher when colleges employed strategies of funds for attending conferences about the needs of Hispanic students, a mission statement concerning Hispanic students, ESL classes, and bilingual education.

Research Question #2: To what extent is Hispanic retention related to a college employing institutional policies on commitment to the education of Hispanic students?

Hispanic retention was not significantly related to institutional policies on commitment to the education of Hispanic students. Funding for research on the needs of Hispanic students was not significant. Because of poor response distribution, it was not possible to determine whether a mission statement concerning Hispanic students, proportional Hispanic staff, or funds for attending conferences on the needs of

Hispanic students were related to Hispanic student retention.

Related findings concerning general student retention. General student retention was related significantly to institutional policy strategies aimed at commitment to education of Hispanic students. Conference funds and a mission statement concerning Hispanic students were shown to be related to general retention. Neither proportional Hispanic staff nor funds for Hispanic research were significant strategies.

Research Question #3: To what extent is Hispanic student retention related to a college employing student services retention strategies?

Proportional financial aid and career counseling into selective programs were significantly related to Hispanic retention rates. Neither recruitment of Hispanic students nor special Hispanic orientation were significantly related to Hispanic retention. It was inconclusive whether academic support services or academic advising about transferability of courses were related to Hispanic retention.

Related findings concerning general student retention. General student retention is not significantly related to a college offering proportional financial aid or career counseling into selective programs.

It was not possible to determine the relationship of Hispanic student recruiting, special Hispanic orientation, academic advising about transferability of courses, or academic support services to general student retention because of collinearity among the student services strategies.

Research Question #4: To what extent is Hispanic student retention related to a college employing curriculum and instruction retention strategies?

Curriculum and instruction strategies of offering bilingual education, ESL classes, and Hispanic ethnic classes were related to Hispanic student retention. Neither staff development concerning the needs of Hispanic students, nor mandatory assessment or placement were significantly related to Hispanic student retention. Because all of the colleges had developmental education courses, it was not possible to determine whether this variable was related to Hispanic student retention.

Related findings concerning general student retention. General student retention was related to ESL classes and bilingual education. Neither staff development concerning the needs of Hispanic students, nor

mandatory assessment or placement were significantly related to general student retention. Because all of the colleges had developmental education courses, it was not possible to determine whether this variable was related to general retention.

Discussion and Analysis

As noted in Chapter One, retention studies can be categorized into those related to student traits, to college retention strategies or to the student's compatibility with the environment of the institution. Research results which rely heavily on college retention strategies (to the exclusion of student traits) for increasing retention were not supported by the findings of this study. The best analysis of data would be one that employed several different analytical modes and resulted in the same set of conclusions from each mode, according to Babbie (1983). This study employed analysis of variance, but otherwise was able to infer relationships only through summarizing descriptive statistics such as means and correlations. None of the retention strategies survived all of the significance standards and eliminations due to collinearity and/or insufficient response distribution. However, five strategies were significant enough in their relationship to Hispanic student retention to

deserve mention.

Conclusions and supporting literature about each of the fourteen strategies are discussed below.

Institutional Policy Strategies

Written mission statement. It is not possible to determine whether a written mission statement committing an institution to enhancing the welfare of Hispanic students is related to Hispanic student retention because of insufficient response distribution. The concern shown by a written mission statement is valuable as it indicates leadership and intervention, as opposed to indifference and prejudice. However, the concern and the statement are not one and the same. Adolphus (1984), Astin (1982), Gilbert (1979), and Valverde (1985) all advocate such a mission statement. Only six percent of the colleges surveyed actually mention Hispanic students in mission statements; however 51 percent mention culturally different students.

Proportional Composition of Staff. It is inconclusive whether or not proportional Hispanic composition of staff is related to Hispanic student retention. Among colleges which reported Hispanic retention rates, only one college had proportional Hispanic staff, and this prevented a

comparison of retention rates between colleges which did have proportional Hispanic staff and colleges which did not. This study neither corroborates nor negates findings of Astin (1982), de los Santos (1982), Godbold (1979), Jackson (1979), and Valverde (1976) which advocate hiring greater numbers of minority staff.

The number of Hispanic administrators has increased from 1978 to 1986. In 1979, Olivas reported that only 2.3 percent of all college administrators were Hispanic, and that only 28.5 percent of the colleges had any Hispanic administrators at all in Arizona, California, Colorado, New Mexico or Texas. This study showed eight percent Hispanic administrators to be average, and 78.5 percent of colleges surveyed to have at least a few Hispanic administrators. Community colleges responding to the survey averaged six percent Hispanic faculty, and 94.8 percent of the colleges to have some Hispanic faculty.

Funding Hispanic research and conference travel expenses. Funding for research about the needs of Hispanic students is not related to Hispanic retention. It is inconclusive whether or not funds for conferences is related to Hispanic retention. This study does not substantiate requests for Hispanic research or conference travel funds,

as recommended by a number of researchers (Astin, 1982; El Plan de Santa Barbara, 1970; Godbold, 1979; Lenning, 1982; and Troike, 1978). Twenty-two percent of the colleges surveyed had funds for Hispanic research, and 90.2 percent had funds available for attending conferences on the needs of Hispanic students.

Student Services Strategies

Recruitment of Hispanic students. It is inconclusive whether or not recruitment of Hispanic students is related to Hispanic retention because of collinearity among some of the student services strategies. This finding is not consistent with findings of Astin (1982), Troike et al. (1981), and Valverde (1985), who advocate special Hispanic recruitment as an effective tool for disseminating information to Hispanic parents and students. While it is a valuable strategy for meeting the needs of Hispanic students, it is not necessarily an effective retention strategy, because it encourages more students who are at risk to enroll. Colleges which enroll more students who are at risk will have lower retention rates than colleges which are selective. Fifty percent of the colleges responding to the survey had special recruitment of Hispanic students. Twenty-one percent used recruitment materials written in Spanish, and

55 percent had Hispanic recruiters.

Financial aid. Equitable financial aid for Hispanic students was defined as equal in amount-per-person to that of non-Hispanic students. It is related to Hispanic retention. Most community colleges possessed records showing that Hispanic students do receive the same amount of financial aid as do non-Hispanic students. The findings of this study did not support the request of El Plan de Santa Barbara (1970) that Hispanic students be given 100 percent grants their first year in college and 75 percent grants plus 25 percent loans their second year, but it did support the inclusion of proportional financial aid in a retention plan.

Special orientation for Hispanic students. It is inconclusive whether or not special orientation for Hispanic students is related to Hispanic retention because of collinearity with other student services strategies. This finding is not consistent with findings by Adolphus (1984), Astin (1982), Cohen (1980), Olivas (1980), Opp & Colby (1986), Rendon (1981), or Valverde (1985). These authors contend that orientation sessions are valuable if they are designed to meet the needs of non-traditional students and give clear outlines of special services for, and expectations of, community college students. Only 22 percent of the colleges surveyed

conduct special orientation for Hispanic students; of these, 13 percent have orientation materials written in Spanish, and 32 percent have Hispanic speakers.

Academic advising about transferability of courses. It is inconclusive whether academic advising concerning transferability of courses to four-year institutions is related to Hispanic retention because of insufficient response distribution and collinearity with other student services strategies. This does not necessarily negate the findings of Adolphus (1984), Astin (1982), Cohen (1980), Rendon (1981), and Lenth (1985), which suggest there is a need for proactive advising for the purpose of encouraging Hispanic students to transfer to four-year institutions. Hispanic students most often begin and end their college careers in community colleges. Ninety-two percent of the colleges surveyed stated that they do advise students about transferability of courses--81 percent describe their advising as intrusive while 34 per cent describe their advising as reactive. Ninety-one percent of the colleges feel they have close contact with nearby four-year institutions. Eighty-five percent disseminate transfer information in written form.

Career counseling into selective programs. Career counseling into

selective programs (programs with entrance requirements) such as pre-law, engineering, pre-medicine, science and technology, is related to Hispanic student retention. These findings are consistent with those of Astin (1987), Ballesteros (1982), Chahin (1986, personal communication), Cohen (1980), Godbold (1979), and Olivas (1980); who suggest that such counseling would increase Hispanic retention. Cohen, Chahin, and Olivas contend that counselors tend to counsel minorities into minority curriculum, thus detracting from minority persistence. Seventy-two percent of the colleges surveyed stated that they counsel minorities into selective programs.

Academic support services. It is inconclusive whether or not academic support services are related to Hispanic student retention because of insufficient response distribution and collinearity. This finding is not consistent with research by Astin, 1982; Burnham, 1983; Duran, 1983; de los Santos, 1982; Gravenberg et al., 1985; McLean, 1979; Noel, 1985; Opp and Colby, 1986; and Payan et al., 1983. The support services included in this study were tutoring, peer tutoring, study groups, and classes or seminars in study skills, time management, and library skills.

Curriculum and Instruction Strategies

Bilingual programs and/or English as a second language (ESL). Bilingual programs and ESL classes are related to Hispanic student retention. Bilingual classes are taught all or in part in the first language of the students, whereas ESL classes are taught in English. Most community colleges in this study (86 percent) offered ESL classes; only 39 percent of the colleges surveyed offered bilingual programs. The findings of this study support the need for the extensive research about which type of bilingual program is the best, or if bilingual programs are effective for Hispanic retention. There is a paucity of research on the efficacy of ESL programs, but the findings of this study indicate a need for more. At present, it is believed that the efficacy of ESL depends upon the group of students and the homogeneity of the group. Some ESL classes may include students whose first language is Spanish plus students whose first language is French, Arabic, or Chinese. Also some ESL classes teach conversational English with the goal of mainstreaming the student as quickly as possible. Others teach English reading and writing skills, with the goal of perfecting these skills before mainstreaming the student.

Hispanic ethnic courses. Offering Hispanic ethnic courses is related to Hispanic student retention. Fifty percent of community colleges surveyed offered such courses. According to the findings of this study, El Plan de Santa Barbara, by requesting such courses in 1970, correctly concluded that curriculum relevant to the Chicano cultural and historical experience would positively affect Hispanic students.

Developmental courses. It is inconclusive whether developmental courses are related to Hispanic student retention or not because of insufficient response distribution. All of the community colleges that responded to the survey offered these courses, so it was not possible to compare retention rates. All the colleges in this study offered study skills, reading, math and English. Fewer of the colleges offered listening skills. Only 29 percent had tutors who speak Spanish. Ninety-four percent of the colleges had learning centers, as advocated by Baker & Painter (1983), Godbold (1979), and Valverde (1985). Fifty-seven percent of these colleges claimed to have Spanish speaking staff in the learning centers.

Mandatory assessment and placement. Mandatory assessment and placement are not related to Hispanic student retention. Almost all

community colleges that responded to the survey had mandatory assessment (91 percent), but only 66 percent had mandatory placement. This difference corroborates the research of Roueche, Baker & Roueche (1985), which reported that more colleges, nationwide, have mandatory assessment than mandatory placement. However it is not consistent with the research findings of many educators who advocate mandatory placement and assessment (Cohen, 1984; McCabe, 1981; Noel et al., 1985; Opp & Colby, 1986; and Roueche et al., 1984).

Staff development on sensitivity to needs of Hispanic students. Staff development is not related to Hispanic student retention or general student retention. Community colleges are based on the premise of staff needing to be student centered and sensitive to the needs of non-traditional students. According to many researchers, this sensitivity is vital to the Hispanic and other minority students (Astin, 1982; Gilbert, 1979; Jackson, 1979; McLean, 1979; and Noar, 1976). Perhaps the absence of this sensitivity (claimed by Astin, 1982; and Chahin, 1986, personal communication) is found more in four-year institutions than in community colleges. Only 38 percent of the colleges responding to the survey conducted staff development concerning the needs of Hispanic

students.

Recommendations

Based on the findings of this study and conclusions drawn,the following recommendations are made:

1. Community college student services deans should ensure career counseling into selective programs to all students, regardless of gender, race or ethnicity.
2. Community college financial aid officers should make financial aid a priority and equalize amounts given in grants, loans and work study throughout all racial and ethnic groups. Special care should be taken to assure that no group is awarded more loans in proportion to grants, because of the disadvantage of having to repay loans.
3. Community college academic deans should implement bilingual education or ESL classes in colleges where they are not already in place. The alternative methods within each of these fields should be carefully weighed and decisions made according to each college's population.
4. Community college academic deans should implement Hispanic

ethnic courses where they are not already in place. Examples offered in a California community college included Chicano Perspective, Mexican Regional Dances, Community Development and the Mexican-American, Mexican Literature, Latin American Women in Literature, United States History from a Chicano Perspective, History of Mexico, Philosophical Currents of Mexican and Chicano Humanism, Chicano Art and Chicano Drama.

Suggestions for Further Research

1. This study should be replicated to explore the relationships between student traits and/or student-institution compatibility and Hispanic retention.
2. This study should be replicated and the design varied to continue exploration of the questions addressed.

   a. Selection of subjects should be more restricted. Many of the colleges surveyed, which had lower than 10 percent or greater than 80 percent Hispanic enrollment, did not deem special Hispanic strategies feasible.

   b. Selection of subjects should be expanded to include

community colleges in Colorado, because many studies and community college organizations include all five states.

c. Subjects should be given a one-semester advance notice of the study so they will keep retention records.

d. The researcher should ask the president, instead of the registrar, to answer institutional policy questions. Registrars often did not have access to all the information needed.

e. The researcher should ask the president to collect and return the three parts.

3. This study should be replicated, substituting different measures of success, for retention. A study of relationships between strategies and grade point averages or student satisfaction, determined by a student survey, would be valuable.

4. This study should be replicated, measuring the extent to which some of the strategies are in place and their relationship to retention.

APPENDICES

COLLEGE OF EDUCATION
THE UNIVERSITY OF TEXAS AT AUSTIN

Department of Educational Administration · Education Building 310 · Austin, Texas 78712-1291 · (512) 471-7551

Dear _____,

Retention of Hispanic community college students is an important issue. Hispanic students are among the most dropout prone students in higher education--56% drop out before completing the first year of college. However, some institutions have documented that the dropout rate among this group can be significantly reduced.

This study is designed to identify those practices which are successful in retaining Hispanic students. Your institution has been selected to participate in this survey along with 145 other community colleges in Texas, New Mexico, Arizona and California. All participating institutions will receive a summary report, detailing effective strategies for increasing retention of Hispanic students.

Directions: This survey has three parts. I would appreciate it if you would forward a copy of Part I of this survey to the Registrar, Part II to the Dean of Student Services, and Part III to the Dean of Academic Affairs on your campus.

Please ask these administrators to return the completed surveys by May 15, 1987 to: Kay P. Walker, 2207 Vista Manor, Kingwood, Texas 77339. For their convenience, I have included self-addressed envelopes for returning the survey. I appreciate your interest in this project and thank you in advance for your professional contribution. Please call (713)359-5095 if you have any questions.

Sincerely,

L A Velverde

Kay P. Walker
Doctoral Candidate
University of Texas

Leonard A. Velverde, Chairman
Education Administration Dept.
Doctoral Dissertation Chairman

COLLEGE OF EDUCATION
THE UNIVERSITY OF TEXAS AT AUSTIN

Department of Educational Administration · Education Building 310 · Austin, Texas 78712-1291 · (512) 471-7551

Dear_____,

On April 27, I mailed a questionnaire to you asking about your college's strategies for retaining Hispanic students. The cover letter is enclosed.

I need your help! As of May 20, I have received some, but not all of the survey parts from your administrators. Would you please ask the following administrator(s) to send me her/his part of my questionnaire? A copy of the missing part is enclosed in case it is needed. If the information is in transit, please disregard this letter.

Questionnaire part not yet received:

_____PART I ADMINISTRATIVE POLICY (REGISTRAR)

_____PART II STUDENT SERVICES (DEAN OF STUDENT SERVICES)

_____PART III CURRICULUM AND INSTRUCTION (DEAN OF ACADEMIC AFFAIRS)

_____ALL PARTS RECEIVED, BUT WITHDRAWAL RATE FOR EITHER SEMESTER OF 1986-87 WAS NOT INDICATED. IF IT IS AT ALL POSSIBLE, PLEASE SEND ME THIS INFORMATION AS IT IS MY DEPENDENT VARIABLE.

Thank you again for any help you can give me in this project. It is obviously very important to me, and I hope to give you some important retention research information when it is complete.

Sincerely,

Kay P. Walker
Doctoral Candidate
University of Texas

PLEASE COMPLETE AND RETURN BY MAY 15, 1987

PART I Administrative Policy (Attn: Registrar)

I hope that you will take a few moments from your busy schedule to share your experiences by completing the questions below. I will release the information in aggregate form only; responses to the following questions will not be attributed to you or to your institution. This section is regarding institutional policies and how they effect Hispanic students.

1. How are Hispanic students identified at your college?
   _____ Surname is Hispanic.
   _____ Identifies self as Hispanic.
   _____ Other

2. Please provide estimates of your 1986 and 1987 enrollment and attrition figures. Attrition is herein defined as students who withdraw from all courses as well as students who make the grade of F in all their courses.

Total credit enrollment(number of students):	_____ Fall 1986	_____ Spring 1987
Total Hispanic credit enrollment (number of students):	_____ Fall 1986	_____ Spring 1987
Total credit students withdrawn from all courses:	_____ December 1986	_____ May 1987
Total credit Hispanic students withdrawn from all courses:	_____ December 1986	_____ May 1987
Total credit students with all Fs:	_____ December 1986	_____ May 1987
Total credit Hispanic students with all Fs:	_____ December 1986	_____ May 1987

3. Please check one statement that best reflects your college's organization of services specifically for Hispanic students.

   _____ Programs and/or services are formally organized under one director or coordinated through one office.
   _____ Programs and/or services operate autonomously.
   _____ There are no programs or services uniquely for Hispanic students.

4. Please check one statement that best reflects the written policy within your college mission which mentions commitment to education of Hispanic students.

_____ Policy specifically refers to Hispanic students.
_____ Policy refers to culturally different students.
_____ Policy refers to high-risk students.

5. Are there any budgeted funds for specific Hispanic oriented programs?_____ Yes _____ No

If yes, what percent of your total budget is this amount? _____%

6. Please estimate the number of total personnel and Hispanic personnel in each of the following staffing categories in your college.

	Total Personnel		Hispanic Personnel	
	Full Time	Part Time	Full Time	Part Time
Administration	_____	_____	_____	_____
Faculty	_____	_____	_____	_____
Counselors (personal, career, academic)	_____	_____	_____	_____
Financial Aid Advisors	_____	_____	_____	_____
Clerical/Receptionist	_____	_____	_____	_____

7. Please describe any other administration policies which concern Hispanic students in your college. What **really** makes your program work?

PART II Student Services (Attn: Dean of Student Services)

I hope that you will take a few moments from your busy schedule to share your experiences by completing the questions below. I will release the information in aggregate form only; responses to the following questions will not be attributed to you or to your institution. This section is concerned with student services and how they affect Hispanic students.

1. Please check all of the following services that are available for Hispanic students on your campus.

Recruitment uniquely for Hispanic students: _____ Yes _____ No. If yes:
_____ Recruitment materials are written in Spanish.
_____ Special workshops are held for Hispanic students in high schools.
_____ Parent education is given for parents of Hispanic students.
_____ Recruiters are Hispanic.
_____ Other

Academic advising about transferability of courses from the community college to a four-year institution. _____ Yes _____ No. If yes:
_____ Advising materials are written in Spanish.
_____ Close contact is made with four-year institutions concerning transfer of credit.
_____ Intrusive advising--Advisors make students aware of transferability of courses.
_____ Reactive advising--Student must initiate plans to transfer courses.
_____ Advisors are specially trained in the area of transferability of courses.
_____ Transfer information is in written form only.
_____ Transfer information is only given verbally.
_____ Transfer information is given in written form and verbally.
_____ Other

Special orientation for Hispanic students: _____ Yes _____ No. If yes:
_____ Orientation material and speeches are in Spanish.
_____ Orientation speakers are Hispanic.
_____ Ethnic values and college values are differentiated.
_____ College expectations of students (academic and social) are described.
_____ Other

Career counseling of Hispanic students into <u>all</u> level careers: _____ Yes _____ No. If yes:
_____ Career counseling materials are written in Spanish.
_____ Aid with entrance into selective programs is given.
_____ Other

Academic development classes and seminars: _____ Yes _____ No. If yes:
_____ Study skills classes are offered.
_____ Time management seminars are offered.
_____ Library and research skills seminars are offered.
_____ Tutoring in Spanish is formally offered.
_____ Peer tutoring with Hispanic tutors is formally offered.
_____ Study groups are organized through counseling office.

2. What is written policy regarding counseling failing students to withdraw from classes?
   _____ Students are counseled to withdraw from classes to safeguard grade point averages.
   _____ Students are counseled to remain in classes regardless of grades in order to learn as much as possible in case the course is failed and must be retaken.
   _____ Student is not encouraged to withdraw or to remain in classes. Advisors and instructors are neutral.
   _____ Other.

3. What is standard practice regarding counseling failing students to withdraw from classes?
   _____ Students are counseled to withdraw from classes to safeguard grade point averages.
   _____ Students are counseled to remain in classes regardless of grades in order to learn as much as possible in case the course is failed and must be retaken.
   _____ Student is not encouraged to withdraw or to remain in classes. Advisors and instructors are neutral.
   _____ Other.

4. Estimate how frequently instructors counsel failing students to withdraw? Check one:
   _____ <34% of the time
   _____ 34-66% of the time
   _____ 67-100% of the time

5. Indicate the percentage of students receiving Financial Aid.

	Full Time	Part Time
General student body	_____%	_____%
Hispanic students	_____%	_____%

6. Indicate the average amount of financial aid per student per semester in the following categories. Then indicate the amounts of grants, loans, and work study for the same categories.

	Average Amount/ Semester	Average Amount of Grants / Semester	Average Amount of Loans/ Semester	Average Amount of Work Study/ Semester
General student body	$_____	$_____	$_____	$_____
Hispanic students	$_____	$_____	$_____	$_____

7. Please describe any other specialized student services that are available uniquely for Hispanic students on your campus. What **really** makes your program work?

PART III Curriculum and Instruction (Attn: Dean of Academic Affairs)

I hope that you will take a few moments from your busy schedule to share your experiences by completing the questions below. I will release the information in aggregate form only; responses to the following questions will not be attributed to you or to your institution. This section concerns curriculum and instruction and how they affect Hispanic students.

Please check all of the following programs or services that are available for Hispanic students and their instructors on your campus.

1. Staff development for faculty on sensitivity to academic and social needs of Hispanic students:
   _____ Yes _____ No.

   If yes, does this staff development include the following:
   _____ Frequent in-service training workshops.
   How often?
   _____ more than 1/semester _____ 1/semester _____ 1/year
   _____ Literature on sensitivity to needs of Hispanic students is available.
   _____ Literature on sensitivity to needs of Hispanic students is circulated.
   _____ Funds are available for attending conferences concerning Hispanic students' needs.
   _____ Funds are actually used.
   Estimate percent of faculty who have attended conferences concerning Hispanic students' needs.

   _____< 10% _____10-25% _____26-50% _____51-75% _____76-100%

   _____ Other staff development.

2. Bilingual programs which allow students to receive instruction concurrently in English and Spanish for a transitional period: _____ Yes _____ No.

   If yes, do these bilingual programs include the following:
   _____ E.S.L. courses are offered.
   _____ Other courses taught concurrently in English and Spanish: _____

3. Hispanic ethnic course offerings: _____ Yes _____ No.

4. Developmental course offerings: _____ Yes _____ No. If yes, do your courses include:
   _____ Reading
   _____ Math
   _____ Writing
   _____ Language development
   _____ Listening skills
   _____ Studying skills
   _____ Other

5. Mandatory assessment for certain courses such as English and Math _____ Yes _____ No.

6. Mandatory placement into developmental courses such as English, Math, and Reading:
_____ Yes _____ No.

7. Learning center is available for individualized assignments and self paced study.
_____ Yes _____ No.
If yes:
_____ Learning center materials are available in Spanish.
_____ Spanish speaking staff are accessible.

8. Do any of your credit programs have minimum requirements? _____ Yes _____ No

9. Indicate the number of positions that have been allocated to each of the following staffing categories within your program.

	Full Time	Part Time
Bilingual education	_____	_____
Hispanic ethnic courses	_____	_____
Developmental education courses	_____	_____
Assessment/Placement	_____	_____
Staff development concerning Hispanic students	_____	_____
Learning Center	_____	_____

10. Please describe any other specialized curriculum and instruction services or programs that are available uniquely for Hispanic students and their instructors on your campus. What **really** makes your program work?

ENROLLMENT AND WITHDRAWAL FIGURES REPORTED

College	General Enrollment	Percent Hispanic Enrollment	Percent General Withdrawal	Percent Hispanic Withdrawal
1.	15404	07	12	12
2.	8553	08	27	
3.	731	32	03	06
4.	1349	23		
5.	1976	49	07	
6.	11344	14	16	03
7.	2350	15	02	03
8.	3310	09		
9.	3357	10	27	22
10.	11342	07	16	
11.	11500	17	10	
12.	4673	20	04	04
13.	3310	07	14	13
14.	26336	11	23	
15.	2142	48	07	08
16.	5120	83	04	
17.	9289	17		
18.	3413	09	17	21
19.	15184	05	16	
20.	2054	14	08	07
21.	19271	06		
22.	5816	37	03	
23.	2448	16	11	
24.	2166	85	04	03
25.	15176	13		
26.	5216	10	04	01
27.	1445	06	05	03
28.	3918	12	07	10
29.	4884	13	52	
30.	23087	63	04	04
31.	4664	06	20	

ENROLLMENT AND WITHDRAWAL FIGURES REPORTED, continued

College	General Enrollment	Percent Hispanic Enrollment	Percent General Withdrawal	Percent Hispanic Withdrawal
32.	945		04	
33.	18340	14		
34.	2095	07		
35.	2608	08	12	
36.	2352	27	16	19
37.	332	12	13	15
38.	9219	10	11	10
39.	10560	13		
40.	6861	10	18	18
41.	5135	08		
42.	7805	10		
43.	794	50	10	08
44.	1121	16	06	07
45.	3336	13	51	
46.	19591	21	15	14
47.	2682	11	07	08
48.	15064	06	13	
49.	10807	08		
50.	13853	71		
51.	4926	37	26	
52.	3563	25	05	05
53.	8497	09	06	
54.	18244	08	24	
55.	15309	09		
56.	2849	08		
57.	4515	19		
58.	869	13	03	09
59.	4550	26	10	13
60.	13146	10	13	
61.	12824	08		
62.	3512	61	22	20
63.	17304	12	21	
64.	8548	14	07	17

ENROLLMENT AND WITHDRAWAL FIGURES REPORTED, continued

College	General Enrollment	Percent Hispanic Enrollment	Percent General Withdrawal	Percent Hispanic Withdrawal
65.	12279	64	20	
66.	18190	16	27	
67.	26127	07	42	
68.	4106	61		
69.	2308	09	09	
70.	4131	06	09	12
71.	1131	54	09	06
72.	13334	11		
73.	7401	16		
74.	21972	08	23	23
75.	23119	10	12	12
76.	20660	23	24	23
77.	424	28	22	04
78.	23205	10		
79.	12414	20	24	
80.	25699	13		
81.	1696	11	09	18
82.	250	56		
83.	8927	45	09	09
84.	21678	14	21	
85.	3751	07	12	
86.	11638	09	39	39
87.	18513	08	24	
88.	4737	08	11	10

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